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United States
Circuit Court of Appeals

For the Ninth Circuit.

Transcript of Record.
(IN THREE VOLUMES.)

WILSON AND WILLARD MANUFACTURING
COMPANY and ELIHU C. WILSON,
Appellants,

vs.

ROBERT E. BOLE and EDWARD DOUBLE,
Appellees.

VOLUME I.
(Pages 1 to 320, Inclusive.)

Upon Appeal from the United States District Court for
the Southern District of California,
Southern Division.

Filed

SEP 28 1915

F. D. Monckton,
Clerk.

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[Clerk's Note: When deemed likely to be of an important nature, errors or doubtful matters appearing in the original certified record are printed literally in italic; and, likewise, cancelled matter appearing in the original certified record is printed and cancelled herein accordingly. When possible, an omission from the text is indicated by printing in italic the two words between which the omission seems to occur. Title heads inserted by the Clerk are enclosed within brackets.]

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Names and Addresses of Attorneys.

For Appellants:

RAYMOND IVES BLAKESLEE, Esq., California Building, Los Angeles, California;
FREDERICK A. STEPHENSON, Esq., Douglas Building, Los Angeles, California.

For Appellees:

FREDERICK S. LYON, Esq., Merchants Trust Building, Los Angeles, California. [7*]

[Citation.]

UNITED STATES OF AMERICA,—ss.

To Edward Double and Robert E. Bole, Greeting:

You are hereby cited and admonished to be and appear at a United States Circuit Court of Appeals for the Ninth Circuit, to be held at the City of San Francisco, in the State of California, on the 17th day of May, A. D. 1915, pursuant to an order allowing an appeal, entered in the clerk's office of the District Court of the United States, of the Ninth Judicial Circuit, in and for the Southern District of California, Southern Division, in that certain suit in equity, No. B-19—Equity, wherein you are complainants and appellees, and Wilson and Willard Manufacturing Company and Elihu C. Wilson are the defendants and appellants, to show cause, if any there be, why the order or decree of said Court made and entered April 16th, 1915, against said appellants, in the said order allowing appeal mentioned, should not be corrected and speedy justice should not be

*Page-number appearing at foot of page of original certified Record.

done to the parties in that behalf.

WITNESS, the Hon. OSCAR A. TRIPPET,
United States District Judge for the Southern Dis-
trict of California, of the Ninth Judicial Circuit, this
23d day of April, 1915.

OSCAR A. TRIPPET,
United States District Judge for the Southern Dis-
trict of California.

Due service and receipt of a copy of the within
citation is hereby admitted this 23d day of April,
1915.

FREDERICK S. LYON,
Solicitor and of Counsel for Complainants. [8]

[Endorsed]: No. B-19—In Equity. United
States District Court, Southern District of Cali-
fornia, Southern Division. Robert E. Bole and Ed-
ward Double, Complainants, vs. Wilson and Willard
Manufacturing Company, and Elihu C. Wilson, De-
fendants. Citation. Filed Apr. 26, 1915. Wm. M.
Van Dyke, Clerk. By R. S. Zimmerman, Deputy
Clerk. [9]

*In the District Court of the United States, in and
for the Southern District of California, South-
ern Division.*

No. B-19—EQ.

ROBERT E. BOLE and EDWARD DOUBLE,
Complainants,

vs.

WILSON & WILLARD MANUFACTURING
COMPANY and ELIHU C. WILSON,
Defendants. [10]

*United States District Court, Southern District of
California, Southern Division.*

IN EQUITY.

ROBERT E. BOLE and EDWARD DOUBLE,
Complainants,

vs.

WILSON & WILLARD MANUFACTURING
COMPANY and ELIHU C. WILSON,
Defendants.

Bill of Complaint.

To the Honorable, the Judges of the District Court
of the United States, in and for the Southern
District of California, Southern Division:

Robert E. Bole and Edward Double, citizens and
residents of the City of Los Angeles, County of Los
Angeles, State of California, bring this their Bill
of Complaint against Wilson & Willard Manufac-
turing Company, a corporation organized and exist-
ing under and by virtue of the laws of the State of
California, and having its principal place of business
in the City of Los Angeles, California, and Elihu C.
Wilson, a citizen and resident of the City of Los
Angeles, County of Los Angeles, State of California,
Defendants, and complaining of said Defendants,
show unto your Honors: [11]

I.

That heretofore, to wit, prior to February 19th,
1913, your orator Robert E. Bole was the original,
first, and sole inventor of a certain new and useful
under-reamer, not known or used by others before

his invention or discovery thereof or patented or described in any printed publication in the United States of America or any foreign country before his invention or discovery thereof, or more than two years prior to his application for letters patent in the United States of America as hereinafter set forth, or in public use or on sale in the United States of America for more than two years prior to his said application for letters patent of the United States therefor and not abandoned, and for which your orator, Robert E. Bole, or his legal representatives or assigns, had not, prior to the filing of his said application for letters patent of the United States, filed or made any application for letters patent thereon in any country foreign to the United States.

II.

That your orator, Robert E. Bole, on February 19th, 1913, made application in writing in due form of law to the Commissioner of Patents of the United States of America in accordance with the then existing laws in such case made and provided and complied in all respects with the conditions and requirements of said law, and on February 12th, 1913, by an instrument in writing in due form of law duly signed by your orator, Robert E. Bole, and by him delivered to your orator, Edward Double, did sell, assign, transfer, and set over unto your orator, Edward Double, an undivided one-half ($\frac{1}{2}$) part [12] of the full and exclusive right, title, and interest in and to the said invention and the letters patent to be granted and issued therefor, and did authorize and request the Commissioner of Patents of the United

States of America to issue said letters patent jointly to your said orators, their heirs, legal representatives, and assigns; that said instrument in writing was on February 19th, 1913, duly recorded in Liber Q-91, Page 379 of Transfers of Patents in the United States Patent Office; that thereafter such proceedings were duly and regularly had and taken in the matter of such application that to wit, on December 2d, 1913, letters patent of the United States of America, Number 1,080,135 were duly and regularly granted, issued, and delivered by the Government of the United States of America to your orators, whereby there was granted and secured to your orators, their heirs, legal representatives, and assigns for the full term of Seventeen (17) years from and after December 2d, 1913, the sole and exclusive right, liberty, and privilege of making, using, and vending to others to be used the said invention throughout the United States of America and the Territories thereof; that said letters patent were duly issued in due form of law, under the seal of the United States Patent Office, and duly signed by the Acting Commissioner of Patents, all as will more fully and at large appear from said letters patent or a duly certified copy thereof which are ready in court to be produced as may be required, and that prior to the grant, issuance, and delivery of said letters patent all proceedings were had and taken which were required by law to be had and taken prior to the issuance of letters patent for new and useful inventions. [13]

III.

Your orators further show unto your Honors that the invention so set forth, described, and claimed in and by said letters patent is of great value, and that since the invention thereof by your orator, Robert E. Bole, under-reamers containing the said invention have gone into great and extensive use, and that the defendants and each of them have at all times had full knowledge and notice of the invention thereof by your orator, Robert E. Bole, and of the grant, issuance, and delivery of said letters patent therefor to your orators, and but for the wrongful and infringing acts of the defendants as hereinafter set forth, your orators would now continue to enjoy the said exclusive rights, and the same would be of great and incalculable benefit and advantage to your orators, and that the said defendants have been long prior to the commencement of this suit notified in writing of the grant, issuance, and delivery of said letters patent, and of the rights of your orators thereunder, and demand has been made upon defendants and each of them to respect the said letters patent and not to infringe thereon.

IV.

Your orators further show unto your Honors that notwithstanding the premises, but well knowing the same, and without the license or consent of your orators or of either of your orators, and in violation of said letters patent and of your orators' rights thereunder, the said defendants herein have, on December 2d, 1913, and on divers days and dates thereafter, and prior to the filing of this Bill of Complaint,

and within the Southern District of California, to wit, in the County of Los [14] Angeles, State of California, and elsewhere, made and sold to others to be used, and are now making and selling to others to be used, under-reamers embodying, containing, and embracing the invention described, claimed, and patented in and by said Letters Patent Number 1,080,135, and have infringed upon the exclusive rights secured to your orators by virtue of said letters patent, and that the under-reamers so made and sold by defendants were and are infringements upon said letters patent and each of said under-reamers contains in it the said patented invention, and that although requested so to do, defendants refuse to cease and desist from the infringement aforesaid, and are now making and selling under-reamers containing and embracing the said patented invention, and threaten and intend to continue so to do, and will continue so to do unless restrained by this Court, and are realizing as your orators are informed and verily believe large gains, profits, and advantages, the exact amount of which is unknown to your orators; that by reason of the premises and the unlawful acts of the defendants aforesaid, your orators have suffered damages in the full sum of Fifty Thousand Dollars (\$50,000.00), and are now suffering great and irreparable damage and injury; that for the wrongs and injuries herein complained of your orators have no plain, speedy, or adequate remedy at law and are without remedy save in a court of equity where matters of this kind are properly cognizable and relievable.

To the end, therefore, that the said defendants, Wilson & Willard Manufacturing Company and Elihu C. Wilson may if they can, show why your orators should not have the relief [15] herein prayed, and may according to the best and utmost of their knowledge, recollection, information, and belief, but not under oath, an answer under oath being hereby expressly waived, full, true, direct and perfect answer make to all and singular the matters and things hereinbefore charged; your orators further pray that the defendants may be enjoined and restrained, both provisionally and perpetually from the further infringement upon the said letters patent, and be decreed to account for and pay over unto your orators the gains and profits realized by the defendants and each of them, from and by reason of the infringement aforesaid and may be decreed to account for and pay over unto your orators the damages suffered by your orators by reason of the said infringement, together with the costs of this suit, and for such other and further or different relief as equity and good conscience shall require.

May it please your Honors to grant unto your orators a Writ of Injunction issued out of and under the seal of this Court, provisionally, and until the final hearing, enjoining and restraining said defendants, the Wilson & Willard Manufacturing Company and Elihu C. Wilson, their officers, agents, attorneys, employees, associates, servants, and confederates, and each and every thereof, from making, or using, or selling any under-reamer containing or embracing the invention patented in and by said letters

patent, and that upon the final hearing of this case said provisional injunction may be made final and perpetual.

And your orators will ever pray.

ROBERT E. BOLE,
EDWARD DOUBLE.

By his Counsel,
FREDERICK S. LYON,
FREDERICK S. LYON,
Solicitor and of Counsel for Complainants.
[16]

United States of America,
State of California,
County of Los Angeles,—ss.

Robert E. Bole, being duly sworn on oath says:

That he is one of the complainants named in the foregoing Bill of Complaint, that he has read said Bill of Complaint and knows the contents thereof, and that the same is true of his own knowledge.

ROBERT E. BOLE.

Subscribed and sworn to before me, this 28th day of July, 1914.

LORRAINE E. DURROW,
Notary Public in and for the County of Los Angeles,
State of California.

[Endorsed]: No. B-19—Eq. United States District Court, Southern District of California, Southern Division. Robert E. Bole and Edward Double, Complainants, vs. Wilson & Willard Manufacturing Company and Elihu C. Wilson, Defendants. In Epuity. Bill of Complaint. Filed Jul. 28, 1914.

Wm. M. Van Dyke, Clerk. By R. S. Zimmerman, Deputy Clerk. Frederick S. Lyon, 504-7 Merchants Trust Building, Los Angeles, Cal., Solicitor for Complainants. [17]

[**Subpoena ad Respondendum.**]

UNITED STATES OF AMERICA.

District Court of the United States, Southern District of California, Southern Division.

IN EQUITY.

The President of the United States of America,
Greeting:

To Wilson & Willard Manufacturing Company and
Elihu C. Wilson.

You are hereby commanded, that you be and appear in said District Court of the United States aforesaid, at the courtroom in Los Angeles, Cal., on or before the twentieth day, excluding the day of service, after service of this subpoena upon you, to answer a Bill of Complaint exhibited against you in said court by Robert E. Bole and Edward Double, who are citizens of the State of California, and to do and receive what the said Court shall have considered in that behalf. And this you are not to omit, under the penalty of FIVE THOUSAND DOLLARS.

WITNESS, The Honorable OLIN WELLBORN, Judge of the District Court of the United States, this 28th day of July, in the year of our Lord one thousand nine hundred and fourteen and of our In-

dependence the one hundred and thirty-ninth.

WM. M. VAN DYKE,
Clerk.

By R. S. Zimmerman,
Deputy Clerk.

MEMORANDUM PURSUANT TO RULE 12, OF
RULES OF PRACTICE FOR THE COURTS
OF EQUITY OF THE UNITED STATES,
PROMULGATED BY THE SUPREME
COURT, NOVEMBER 4, 1912.

On or before the twentieth day after service of the subpoena, excluding the day thereof, the defendant is required to file his answer or other defense in the clerk's office; otherwise the Bill may be taken *pro confesso*.

WM. M. VAN DYKE,
Clerk.

By R. S. Zimmerman,
Deputy Clerk. [18]

To the Marshal of the United States for the Southern District of California:

Pursuant to Rule 12, the within subpoena is returnable into the clerk's office twenty days from the issuing thereof.

Subpoena issued July 28th, 1914.

WM. M. VAN DYKE,
Clerk.

By R. S. Zimmerman,
Deputy Clerk.

United States Marshal's Office,
Southern District of California.

I HEREBY CERTIFY, that I received the within writ on the 30th day of July, 1914, and personally served the same on the 1st day of August, 1914, on Wilson & Willard Mfg. Co. by delivering to and leaving with E. C. Wilson personally and E. C. Wilson for the Willard & Wilson Mfg. Co., said defendants named therein, personally, at the County of L. A., in said District, a copy thereof.

Los Angeles, August 1st, 1914.

W. T. WALTON,
U. S. Marshal,
By D. S. Bassett,
Deputy.

[Endorsed]: Marshal's Civil Docket No. 2479. No. B-19—Equity. U. S. District Court, Southern District of California, Southern Division. In Equity. Robert E. Bole et als. vs. Wilson & Willard Mfg. Co. et als. Subpoena. Filed Aug. 1, 1914, Wm. M. Van Dyke, Clerk. By R. S. Zimmerman, Deputy Clerk. Eq. R. B. 430. [19]

*In the United States District Court, Southern
District of California, Southern Division.*

IN EQUITY—No. B-19.

ROBERT E. BOLE and EDWARD DOUBLE,
Complainants,

vs.

WILSON & WILLARD MANUFACTURING
COMPANY and ELIHU C. WILSON,
Defendants.

Amended and Substituted Answer.

Come now Wilson and Willard Manufacturing Company and Elihu C. Wilson, defendants in the above-entitled suit, and each and both, for Answer to the Bill of Complaint of said complainants:

I.

Deny that prior to February 19, 1913, or at any time, complainant Robert E. Bole was the original, first and sole inventor of any new and useful under-reamer or any under-reamer; deny that the same was not known nor used by others before his purported invention or discovery thereof, or patented, or described in any printed publication in the United States of America or any foreign country before his purported invention or discovery thereof.

II.

Admit that the complainant Robert E. Bole, on February 19, 1913, made application in writing in some form or other to the Commissioner of Patents of the United States of America, but deny that on February 12, 1913, complainant Robert E. Bole by

an instrument in writing or in any manner whatsoever by complainant Robert E. Bole delivered [20] to complainant Edward Double, did sell, assign, transfer and set over unto said complainant Edward Double an undivided one-half ($\frac{1}{2}$) part or any part of the full and exclusive, or any right, title and interest in and to any invention and any letters patent, or did authorize and request the Commissioner of Patents of the United States of America or any other person or official to issue any letters patent jointly to said complainants, their heirs, legal representatives, or assigns; deny that said instrument in writing was on February 19, 1913, duly recorded in Liber Q-91, page 379, of Transfers of Patents in the United States Patent Office, or in any other place of purported recordation; admit that after erroneous, careless or inadvertent action and procedure on the part of the United States Patent Office in the matter of such application, pretended letters patent No. 1,080,135 of the United States of America, were, December 2, 1913, granted, issued and delivered, but not duly or regularly, by the Government of the United States of America, to complainants, whereby there was purported to be granted and secured, though improperly, as hereinafter set forth, to said complainants, their heirs, legal representatives and assigns, for the full term of seventeen (17) years from and after December 2, 1913, the sole and exclusive right, liberty and privilege of making, using and vending to others to be used the said invention throughout the United States of America and the territories thereof, which invention, as a matter of

fact, was the property of and was produced by the defendant Elihu C. Wilson herein, all as will more fully hereinafter be set forth, and whose claim of such invention was for many months known in and by the Patent Office of the United States of America prior to the date of improper or inadvertent issuance of said pretended letters patent to said Robert E. Bole and his purported assignee, said Edward Double; deny, being only so informed by the Bill of Complaint [21] herein, that said pretended letters patent were duly issued in due form of law under the seal of the United States Patent Office, or duly signed by the Acting Commissioner of Patents or by any official thereunto empowered whatsoever, or that prior to the grant, issuance and delivery of said letters patent all proceedings were had and taken which were required by law to be had and taken prior to the issuance of letters patent for new and useful inventions, and on the contrary aver and contend that the proceedings taken prior to the grant, issuance and delivery of said letters patent were incomplete or inadvertent and not in accordance with the law and proper practice binding upon, and in force within the portals of, the United States Patent Office and the Commissioner of Patents of the United States of America.

III.

Admit that the invention set forth, described and claimed in and by said purported letters patent No. 1,080,135 is of great value, and that since the invention or production thereof by the defendant Elihu C. Wilson, and not by the complainant Robert E. Bole,

under-reamers containing the said invention have gone into great and extensive use; deny that the defendants and each of them had at all or any times any knowledge and notice of the invention thereof by the complainant Robert E. Bole, and of the grant, issuance and delivery of said pretended letters patent therefor to the complainants, but on the contrary aver that said complainants have had at all times full knowledge and notice of the invention or production thereof by the defendant Elihu C. Wilson; deny that but for the alleged wrongful and infringing acts of the defendants the complainants would now continue to enjoy the said exclusive rights or any exclusive rights, and aver that said pretended letters patent were wrongfully and fraudulently obtained and secured in and to said complainants no true and substantial rights, cognizable by law or equity; [22] deny that the same could or would be of any or great and incalculable benefit or advantage to complainants because unlawfully, wrongfully, and fraudulently claimed and asserted; admit that the complainants or the complainant Robert E. Bole, had the temerity prior to the commencement of this suit to notify the defendants in writing of the grant, issuance and delivery of said purported and fraudulently obtained letters patent, and of the alleged rights of the complainants thereunder, and that impertinent demand has been made upon defendants and each of them to respect the said purported and wrongfully obtained and issued letters patent and not to infringe thereon.

IV.

Admit that without the license or consent of complainants or either of them, such license or consent being in law and equity useless and valueless because of the fraudulent application for said pretended letters patent by said complainant Robert E. Bole, and therefore in violation of no valid letters patent and no pretended rights of the complainants thereunder, the defendants herein have both before and subsequent to the application for the issuance of said pretended letters patent, and prior to the filing of this Bill of Complaint, and with the Southern District of California, to wit, in the County of Los Angeles, State of California, made and sold to others to be used, and are now making and selling to others to be used, under-reamers embodying, containing and embracing the invention described, claimed and wrongfully patented in and by pretended letters patent Number 1,080,135, but deny that they can have infringed upon the alleged exclusive or any rights purported to be secured to the complainants by virtue of said purported letters patent, because of the invalidity of said letters patent as hereinabove and hereinafter set forth; deny that the under-reamers so made and sold by defendants were and are or could be infringements upon any valid [23] letters patent of said complainants, but admit that each of said under-reamers contains in it the invention or substantially the invention described, claimed and patented in and by said wrongfully obtained letters patent Number 1,080,135; admit that defendants refused to cease and desist from the al-

leged infringing acts aforesaid, and are now making and selling under-reamers containing and embracing the said invention, and threaten and intend to continue so to do, and will be able to show unto this Court that they are entitled so to do and may properly so do; admit that they are realizing certain gains, profits and advantages; deny that by reason of the premises or any purported unlawful acts the complainants have suffered damages in the full sum of Fifty Thousand dollars (\$50,000) or any damages whatsoever, or are now suffering great or irreparable or any damage or injury, avering that the complainants have no rights or privileges to be traversed or encroached upon in the premises; admit that for the alleged but nonexistent wrongs and injuries complained of complainants have no plain, speedy or adequate or any remedy at law and contend that complainants are without remedy even in this court of Equity, not coming herein with clean hands but rather upon the insupportable and fraudulent contentions and wrongfully asserted rights and improperly or inadvertently issued pretended letters patent of said complainants.

V.

Defendants allege that the said pretended letters patent are wholly void and of no effect and did not secure and do not secure to the alleged grantees thereof at any time the alleged or any exclusive rights whatsoever; that on the contrary, the pretended inventor, Robert E. Bole, was not the original, first or sole inventor of any material or any part of the subject matter of said pretended and wrong-

fully obtained letters patent, but obtained all his knowledge and information with respect [24] to such subject matter from the defendant herein, Elihu C. Wilson, who filed an application for letters patent of the United States therefor March 18, 1913, such Elihu C. Wilson, the defendant, being the true, original, first and sole inventor of the subject matter of said pretended letters patent, and who was using reasonable diligence in adapting and perfecting said invention, and who was, with said defendant Wilson & Willard Manufacturing Company, on his own behalf, manufacturing and selling underreamers embodying said invention at Los Angeles, County of Los Angeles, State of California, in said Southern Division of said Southern District of California, all with the knowledge of and without protest of said complainant Robert E. Bole, for a period of over one year prior to said pretended invention by said Robert E. Bole and to the filing of said application for said pretended letters patent by said Robert E. Bole; and that said Robert E. Bole thus unjustly and fraudulently applied for and obtained said pretended letters patent for what was in fact the invention and production, and generally recognized and admitted invention and production, of said defendant Elihu C. Wilson; and further aver that on February 3, 1914, the Commissioner of Patents, of the United States Patent Office, did declare an interference or contest of priority of invention to exist between said application for letters patent for said invention filed by said defendant Elihu C. Wilson and said pretended letters patent Number 1,080,135,

and that proceedings have been had and taken therein on behalf of defendant Elihu C. Wilson conclusively tending to prove said Elihu C. Wilson to be the original, first and sole and true inventor of the invention of said pretended letters patent issued to said complainant Robert E. Bole.

VI.

As a counterclaim or set-off to the alleged and pretended [25] cause of action of the complainants herein against the defendants. Defendants show this Court that in and as part of a settlement of account between said complainant Robert E. Bole and said defendants, of which said Wilson is the president of said company, enforced by the defendants because of the excessive and long increasing indebtedness of said Robert E. Bole to said defendant Wilson & Willard Manufacturing Company, and effected within twenty days prior to the filing by said Robert E. Bole of the application for said pretended letters patent Number 1,080,135, said Robert E. Bole, having during altercations about said account unjustly and maliciously asserted a right and interest in and concerning said invention the subject matter of said pretended letters patent, did not the time of said settlement of account, withdraw and waive any claim of right of invention or interest whatsoever pertaining to the invention being said subject matter of said pretended letters patent; that in violation of said covenant said Bole did, if the allegations thereunto in the Bill of Complaint be true, immediately assign an undivided one-half ($\frac{1}{2}$) interest in and to said invention, known by said

Robert E. Bole to be the production and property of said Defendant Elihu C. Wilson, to said complainant Edward Double, a sharp business competitor of said defendants, and did thereupon prepare and file in the United States Patent Office, with fraudulent intent, an application for said subsequently issued pretended letters patent; that by reason of the premises and the unlawful and improper acts of the complainants aforesaid, and by the improper and damaging assertions by complainants in the trade and elsewhere that said Robert E. Bole and not said Elihu C. Wilson is the true, lawful, original, first and sole inventor of the said invention, and by reason of the large and burdensome expense to which the defendant Elihu C. Wilson has been subjected by reason of said priority contest tardily instituted by the [26] Commissioner of Patents to determine to which application of the said copending applications for letters patent of the United States for said invention, said improper patentee—complainant Robert E. Bole, or said defendant Elihu C. Wilson, is the true, original, first and sole inventor of the subject matter of said pretended letters patent Number 1,080,135; and by reason of the expense, annoyance and labor to which the defendants are thus wrongfully put as concerns the defense of this present action, the defendants, and particularly the defendant Elihu C. Wilson, have suffered damages in the full sum of Seventy-five Thousand Dollars (\$75,000) and are now suffering great and irreparable damage and injury.

WHEREFORE, Defendants pray to be hence dis-

missed with their reasonable costs and disbursements in this behalf sustained, together with judgment against said complainants in the said sum of Seventy-five Thousand Dollars (\$75,000) with interest.

WILSON AND WILLARD MANUFACTURING COMPANY and

ELIHU C. WILSON,

By RAYMOND IVES BLAKESLEE,

Their Solicitor.

RAYMOND IVES BLAKESLEE,

Solicitor and Counsel for Defendants.

[Endorsed]: No. B-19—Equity. United States District Court, Southern District of California, Southern Division. Robert E. Bole and Edward Double, Complainants, vs. Wilson & Willard Mfg. Co., and Elihu C. Wilson, Defendants. Amended and Substituted Answer. Received a Copy of the Within Amended and Substituted Answer this 20th day of August, 1914. Frederick S. Lyon, Solicitor for Complainants. Filed Aug. 20, 1914. Wm. M. Van Dyke, Clerk. By Leslie S. Colyer, Deputy Clerk. Raymond Ives Blakeslee, 728-30 California Building, Los Angeles, Cal., Solicitor for Defendants. [27]

[Motion to Strike Alleged Counterclaim.]

*United States District Court, Southern District of
California, Southern Division.*

IN EQUITY—No. B-19.

ROBERT E. BOLE and EDWARD DOUBLE,
Complainants,

vs.

WILSON & WILLARD MANUFACTURING
COMPANY and ELIHU C. WILSON,
Defendants.

To Wilson & Willard Manufacturing Company and
Elihu C. Wilson, Defendants Above Named, and
Raymond Ives Blakeslee, Their Solicitor:

Please take notice that complainants will bring on
for hearing before the Court, at the courtrooms
thereof, on Monday, August 31st, 1914, at the open-
ing of court on said day or as soon thereafter as
counsel can be heard, the attached Motion to Strike
Out the Alleged Counterclaim or Setoff, attempted
or pretended to be set up in the amended and sub-
stituted answer of the defendants in the above-en-
titled suit.

FREDERICK S. LYON,
Solicitor for Complainants. [28]

*United States District Court, Southern District of
California, Southern Division.*

IN EQUITY—No. B-19.

ROBERT E. BOLE and EDWARD DOUBLE,
Complainants,

vs.

WILSON & WILLARD MANUFACTURING
COMPANY and ELIHU C. WILSON,
Defendants.

**Motion to Strike Out Alleged Counterclaim or
Setoff.**

Come now complainants above named, by Frederick S. Lyon, their solicitor, and move to strike out the alleged counterclaim or setoff attempted to be set up in Paragraph VI of defendants' amended and substituted answer, upon the following grounds:

First. That the same is insufficient in law to be answered unto by these complainants or either of them.

Second. That the same is not a counterclaim or setoff within Equity Rule 30.

Third. That from the allegations and recitals of said Paragraph VI of said amended and substituted answer it appears [29] that in law and in equity the said defendants or either of them have no counterclaim or setoff either in law or in equity against these complainants or either of them.

Fourth. That the following recital or allegation of said Paragraph VI is impertinent to, irrelevant to, and immaterial to any such pretended counter-

claim or setoff on behalf of either of said defendants, to wit:

“And by reason of the large and burdensome expense to which the defendant Elihu C. Wilson has been subjected by reason of said priority contest tardily instituted by the Commissioner of Patents to determine to which applicant of the said copending applications for letters patent of the United States for said invention, said improper patentee—complainant Robert E. Bole, or said defendant Elihu C. Wilson, is the true, original, first and sole inventor of the subject matter of said pretended Letters Patent Number 1,080,135.”

FREDERICK S. LYON,
Solicitor for Complainants.

[Endorsed]: No. B-19. United States District Court, Southern District of California, Southern Division. Robert E. Bole and Edward Double, Complainants, vs. Wilson & Willard Mfg. Company and Elihu C. Wilson, Defendants. In Equity. Notice, and Motion to Strike Out Alleged Counterclaim or Setoff. Received a Copy of the Within Motion this August 21, 1914, Raymond Ives Blakeslee, Solicitor for Defendants. Filed Aug. 21, 1914, Wm. M. Van Dyke, Clerk. By Chas. N. Williams, Deputy Clerk. Frederick S. Lyon, 504-7 Merchants Trust Building, Los Angeles, Cal., Solicitor for Complainants. [30]

At a stated term, to wit, the July Term, A. D. 1914. of the District Court of the United States of America, in and for the Southern District of California, Southern Division, held at the Court-room thereof in the City of Los Angeles, on Wednesday, the twenty-eighth day of October, in the year of our Lord one thousand nine hundred and fourteen. Present: The Honorable BENJAMIN F. BLEDSOE, District Judge.

**[Order Granting Motion to Strike Alleged
Counterclaim.]**

No. B-19—EQUITY.

ROBERT E. BOLE et al.,

Complainants,

vs.

WILSON & WILLARD MANUFACTURING
COMPANY et al.,

Defendants.

This cause coming on at this time to be heard on the motion to strike out the alleged counterclaim or setoff herein; Frederick S. Lyon, Esq., appearing as counsel for complainants; Raymond Ives Blakeslee, Esq., appearing as counsel for defendants; and said motion having been argued, in support thereof, by Frederick S. Lyon, Esq., of counsel for complainants, and in opposition thereto by Raymond Ives Blakeslee, Esq., of counsel for defendants; and this cause having been submitted to the Court for its consideration and decision on said motion and the

Defendants further aver that proceedings have been further had and taken on behalf of complainant herein, Robert E. Bole, in which proceedings said complainant has failed to establish his right to said pretended letters patent No. 1,080,135, or to the invention set forth and claimed therein, and has likewise failed to controvert the proofs that said Elihu C. Wilson, of defendants, is the original, first and sole and true inventor of the invention of said pretended letters patent issued to said complainant Robert E. Bole; that a considerable period of time will necessarily elapse before the United States Patent Office [33] can hear and determine this said cause in interference or contest of priority; and that if judgment of priority in said interference cause is awarded to the defendant Elihu C. Wilson herein, letters patent of the United States will in due course issue to said Elihu C. Wilson for the subject matter of said pretended letters patent No. 1,080,135, including all of the claims thereof, whereupon it will be necessary to invoke the powers of this Court, under the statutes, to cancel one or the other of such letters patent, namely, the letters patent, if granted to said defendant Elihu C. Wilson, or such pretended letters patent No. 1,080,135; and that until such contest of priority has been determined by the United States Patent Office and such further contest as may be necessary with respect to originality and priority of invention pertinent to the subject matter of said pretended letters patent has been decided, it will be impossible for this Court in the usual and approved and proper and complete

Angeles, California, I shall present for the consideration of the Court the annexed motion for leave to amend, etc., the answer herein.

Dated at Los Angeles, California, October 31, 1914.

RAYMOND IVES BLAKESLEE,
Solicitor and of Counsel for Defendants. [32]

In the United States District Court, Southern District of California, Southern Division.

IN EQUITY—No. B-19.

ROBERT E. BOLE and EDWARD DOUBLE,
Complainants,

vs.

WILSON and WILLARD MANUFACTURING
COMPANY and ELIHU C. WILSON,
Defendants.

Motion for Leave to Amend Answer, etc.

Now come the defendants herein, Wilson and Willard Manufacturing Company and Elihu C. Wilson, by their solicitor and counsel Raymond Ives Blakeslee, and move this Honorable Court for leave to amend and amplify and restore to the amended and substituted answer herein in the respects and particulars hereinafter noted. At the hearing of this Motion the defendants will rely upon the record in this case and upon the affidavit of Raymond Ives Blakeslee, solicitor and counsel for defendants, hereunto annexed.

Petition is made for leave to amend as follows: By inserting at the end of paragraph V:

oral argument thereof, it is now by the Court ordered that said motion to strike out herein the alleged counterclaim or setoff be, and the same hereby is granted.

[Endorsed]: No. B-19—Eq. United States District Court, Southern District of California, Southern Division. Robert E. Bole et al. vs. Wilson & Willard Manufacturing Company et al. Copy Minute Order Granting Motion to Strike out Alleged Counterclaim or Setoff. Filed Apr. 17, 1915. Wm. M. Van Dyke, Clerk. By Leslie S. Colyer, Deputy.
[31]

In the United States District Court, Southern District of California, Southern Division.

IN EQUITY—No. B-19.

ROBERT E. BOLE and EDWARD DOUBLE,
Complainants,

vs.

WILSON & WILLARD MANUFACTURING
COMPANY and ELIHU C. WILSON,
Defendants.

Notice of Motion.

To Robert E. Bole and Edward Double, Complainants Herein, and Frederick S. Lyon, Their Solicitor:

Please take notice that on Monday, November 16th, 1914, at the hour of 10:30 o'clock A. M., or as soon thereafter as counsel can be heard, at the courtroom of this court, in the Federal Building, Los

manner to pass upon and determine the validity or invalidity of said pretended letters patent No. 1,080,135, and to determine who, whether said complainant Robert E. Bole or said defendant Elihu C. Wilson, is the original, first and sole and true inventor of the invention, the subject of said pretended letters patent sued under herein.

VI.

Defendants further allege and show this Court that in and as part of a settlement of account, at one time existing between said complainant Robert E. Bole and said defendants, of which defendants said Wilson is and was the president of said defendant company, enforced by the defendants because of the excessive and long increasing indebtedness of said Robert E. Bole to said defendant Wilson & Willard Manufacturing Company, and the increasingly unsatisfactory business relations between said Robert E. Bole and said defendants, and effected within substantially twenty [34] days prior to the filing by said Robert E. Bole of the application for said pretended letters patent No. 1,080,135, said Robert E. Bole having during altercations concerning said account and said business relations unjustly and maliciously asserted a right and interest in and concerning said invention, the subject matter of said pretended letters patent, did, at the time of said settlement of account and business relations, withdraw and waive any claim or right of invention or interest whatsoever pertaining to the invention being said subject matter of said pretended letters patent, and did covenant that in no way would said Robert

E. Bole injure or cause injury to or damage or cause damage to said defendants in any manner whatsoever with relation to said invention the subject matter of said pretended letters patent; whereby said complainant Robert E. Bole and said complainant Edward Double, assignee of one-half interest in and to said invention, if the allegations thereunto in the Bill of Complaint herein be true, is and are estopped from asserting any pretended right or claim, as in the Bill of Complaint herein may be set forth, against said defendants herein or either of them.

VII.

As a counterclaim or set-off to the alleged or pretended cause of action of the complainants herein against the defendants, the defendants allege: That heretofore, to wit, prior to the 19th day of February, 1913, complainant Robert E. Bole entered into certain business transactions and relations with the defendants herein, of which defendant corporation the defendant Elihu C. Wilson was at all times the president; that among such business relations was that concerning the business of complainant Robert E. Bole under the name of the Bole Pump Company; that the said the Bole Pump Company for a period of years prior to said 19th day of February, 1913, had an account with said defendant corporation pertaining to the manufacture on behalf [35] of said the Bole Pump Company, of pumps and the like; that on or about the first day of January, 1913, said Bole Pump Company account on the books of said corporation showed an indebtedness to said de-

fendant corporation in approximately the sum of Ten Thousand Dollars (\$10,000); that prior to this time the relations between said defendants and said complainant Robert E. Bole had been generally friendly; that on or about the first day of January, 1913, demand was made by said defendant corporation upon said Robert E. Bole for a settlement of the affairs of the said the Bole Pump Company; that as a result thereof during the month of January, 1913, said Robert E. Bole assumed an attitude of antagonism and bitterness toward said defendants, and sent a certain communication to said defendant Elihu C. Wilson of an insulting and defiant nature entirely uncalled for by reason of the business demands made by said defendant corporation through said defendant Elihu C. Wilson, its president, upon said complainant Robert E. Bole, that such account between the said the Bole Pump Company and said defendant corporation be settled; that in said communication said Robert E. Bole did for the first time unjustly and falsely and maliciously assert to the defendants a right and interest in and concerning said invention, the subject matter of said pretended letters patent; that on or about the first day of February, 1913, said Bole Pump Company account and all matters of account and business relations between said Robert E. Bole and said defendants were settled, in connection with which and as a part of which said Robert E. Bole did withdraw and waive any claim of right of invention or interest whatsoever pertaining to the invention, being the said subject matter of said pretended

letters patent, and did covenant at no time and in no manner to harm or injure or cause harm or injury to said defendants in connection with said invention or in any way to harass or trouble said defendants in connection with the subject matter of said [36] pretended letters patent in suit or any part thereof; that prior to this time last mentioned, and for at least a period of one year prior thereto, said defendants had made or caused to be made and manufactured, without protest from said defendant Robert E. Bole, a large number of under-reamers or devices containing or embodying the subject matter of said pretended letters patent, in the presence of and without protest from said Robert E. Bole; that in violation of the said covenant forming a part of the settlement between said Robert E. Bole and said defendants herein, entered into on or about the first day of February, 1913, said Bole did, if the allegations thereunto in the Bill of Complaint be true, immediately assign an undivided one-half interest in and to said invention, known by said Robert E. Bole to be the production and property of said defendant Elihu C. Wilson, and as to its embodiment in manufacture to be an important part of the business of said defendant corporation, to said complainant Edward Double, a sharp business competitor of said defendants, at that time and for a long period of time prior thereto, and thereupon prepared and filed in the United States Patent Office, with fraudulent intent, an application for said subsequently issued pretended letters patent; that said complainant Edward Double, by reason of said

assignment, as to any interest which he may have in said pretended letters patent and in the alleged cause of action herein or any part thereof is subjected to the covenant of said complainant Bole hereinabove set forth and subject to all conditions, limitations, restrictions, waivers and the like attaching to said interest or any part thereof and whether springing from any act or acquiescence or permission or disclaimer or allowance of said complainant Robert E. Bole or otherwise, with respect thereto; that on March 18, 1913, defendant herein, Elihu C. Wilson, did file an application in the United States Patent Office for, the subject matter of said [37] pretended letters patent; that on February 3, 1914, the Commissioner of Patents of the United States Patent Office did declare an interference as to priority of invention to exist between said application for letters patent for said invention so filed by said defendant Elihu C. Wilson and said pretended letters patent in suit; that proceedings have been had and taken therein on behalf of the parties conclusively tending to prove said defendant Elihu C. Wilson to be the original, first and sole and true inventor of the invention of said pretended letters patent hastily and improperly or inadvertently issued to said complainant Robert E. Bole, all of which has caused large expense and damage to said defendant Elihu C. Wilson; that said complainants and more particularly said complainant Edward Double and the business interests with which he is associated, being as before mentioned sharp competitors of the business interests of said defendants,

have, within the year last past, and within the Southern District of California and Southern Division thereof, and elsewhere, issued and uttered false and improper and damaging assertions to the trade and in the field and elsewhere, that said Robert E. Bole and not said Elihu C. Wilson is the true, lawful, original, first and sole inventor of said invention, all to the damage and hurt and injury of said defendants and particularly said defendant Elihu C. Wilson, and in violation of the covenant, waiver and disclaimer made and entered into by said Robert E. Bole as hereinabove recited on or about the first day of February, 1913, in favor of and for the purported protection of said defendants; and that by reason of such breaches of covenant by said complainants, and attaching to and surrounding and arising out of the transaction being the claim of infringement set forth in this Bill of Complaint, including the large and burdensome expense, annoyance and labor to which the defendant Wilson herein has been wrongfully subjected and put as hereinabove set forth, and such also as [38] concerns the defense of this present action, and to which said defendants are now being put and subjected, said defendants have suffered damages in the full sum of Seventy-five Thousand Dollars (\$75,000) and are now suffering great and irreparable damage and injury, all of which cannot be ascertained or determined properly save and except in this Court of Equity and in connection with the determination of the issues raised by the Bill of Complaint herein.

WHEREFORE, defendants pray to be hence dismissed with their reasonable costs and disbursements in this behalf sustained, together with judgment against said complainants in the said sum of Seventy-five Thousand Dollars (\$75,000) with interest.—

RAYMOND IVES BLAKESLEE,

Solicitor and of Counsel for Defendants.

Dated October 31, 1914. [39]

In the United States District Court, Southern District of California, Southern Division.

IN EQUITY—No. B-19.

ROBERT E. BOLE and EDWARD DOUBLE,
Complainants,

vs.

WILSON & WILLARD MANUFACTURING
COMPANY and ELIHU C. WILSON,
Defendants.

**Affidavit of Raymond Ives Blakeslee, Solicitor and
Counsel for Defendants.**

State of California,
County of Los Angeles,—ss.

Raymond Ives Blakeslee, being duly sworn, deposes and says: That he is an attorney and counsellor at law, being solicitor and counsel for defendants in the above-entitled cause in equity; that the original answer to the Bill of Complaint herein contained an alleged counterclaim or setoff as to which motion was brought by complainants under Equity

Rule No. 33 to strike out such alleged counterclaim or setoff; that such motion came on for hearing before this Court the 28th day of October, 1914, and was granted; that in order to fully protect the rights of the defendants herein affiant deems it proper to insert within the Answer herein the amendatory matter of the annexed motion to amend the Answer herein, for the following reasons, to wit:

That the alleged counterclaim or setoff heretofore presented in the answer contained certain allegations with respect to a covenant, waiver or disclaimer on the part of the complainant Bole, which, having been stricken from the answer, as part of such alleged counterclaim or setoff, are necessary to be inserted within the answer proper as part of the proper defense to be interposed in this cause of action; that with respect to [40] said alleged counterclaim or setoff affiant has further considered Equity Rule 30 with respect to answers and counterclaims and setoffs and the like to be incorporated in such answers, and has discovered a further interpretation of such rule, in addition to and rendered subsequent to the judicial decisions jointly discussed by counsel on the hearing of said motion to strike out said counterclaim, and which is believed by affiant to warrant the entertainment and consideration by this Court of the elaborated counterclaim or setoff embodied in the proposed amendments to the answer set forth in the annexed motion; that said authority so referred to is the opinion of the Court in *re Salt's Textile Mfg. Co. vs Tingle Mfg. Co.*, rendered October 4, 1913, in the District Court for the

District of Connecticut, and reported in Federal Reporter Volume 208 page 156; that affiant believes that such decision should be considered by this Court in order that full justice may be done to and protection awarded to the defendants herein under said Equity Rule 30; that as to the remaining portions of the proposed amendments to the answer it is believed the same are properly interposed in order that the rights of the defendants be properly conserved and the business of this Court be prevented from the imposition of unnecessary or what may well or reasonably be unnecessary labor; and the granting of this motion to amend including the counterclaim or setoff therein interposed is solicited upon such just terms, within Equity Rule 19, as may properly be imposed, such Rule 19 so permitting such amendments at any time.

RAYMOND IVES BLAKESLEE.

Subscribed and sworn to before me this 31st day of October, 1914.

[Seal] FRANCIS L. ISGRIGG,
Notary Public in and for the County of Los Angeles,
State of California. [41]

[Endorsed]: In Equity. No. B-19. United States District Court, Southern District of California Southern Division. Robert E. Bole and Edward Double, Complainants, vs. Wilson & Willard Mfg. Co. and Elihu C. Wilson, Defendants. Notice of Motion, Motion and Affidavit thereon for Leave to Amend Answer, etc. Filed Nov. 2, 1914, Wm. M. Van Dyke, Clerk. By Chas. N. Williams, Deputy Clerk. Received a copy of the within Motion, Notice of Motion

and Affidavit, this 31 day of October, 1914. Frederick S. Lyon, Solicitor for Complainants. Raymond Ives Blakeslee, 728-30 California Building, Los Angeles, Cal., Solicitor for Defendants. [42]

[Order Granting Motion to Amend, etc.]

At a stated term, to wit, the January Term, A. D. 1915, of the District Court of the United States of America, in and for the Southern District of California, Southern Division, held at the courtroom thereof, in the City of Los Angeles, on Friday, the fifteenth day of January, in the year of our Lord, one thousand nine hundred and fifteen. Present: The Honorable BENJAMIN F. BLEDSOE, District Judge.

No. B—19—EQUITY.

ROBERT E. BOLE—et al.,

Complainants,

vs.

WILSON & WILLARD MANUFACTURING
CO.

Defendants.

This cause having heretofore been submitted to the Court for its consideration and decision on defendant's motion for leave to amend answer to the bill of complaint; and the Court having duly considered the same and being fully advised in the premises, it is ordered that said motion of defendant for leave to amend answer to the bill of complaint be, and the same hereby is granted.

[Endorsed]: No. B-19—Eq. United States District Court, Southern District of California, Southern Division. Robert E. Bole, et al., Complainants, vs. Wilson & Willard Mfg. Co., et al., Defendants. Copy Order Granting Motion of Defendant for Leave to Amend Answer to Bill of Complaint. [43]

In the United States District Court, Southern District of California, Southern Division.

IN EQUITY—No. B-19.

ROBERT E. BOLE and EDWARD DOUBLE,
Complainants,

vs.

WILSON & WILLARD MANUFACTURING
COMPANY and ELIHU C. WILSON,
Defendants.

Reply.

The Reply of Robert E. Bole and Edward Double, Complainants in the above-entitled Suit to the alleged counterclaim or setoff of Elihu C. Wilson and Wilson and Willard Manufacturing Company, Defendants.

Complainants admit that for many years prior to February 19, 1913, complainant Robert E. Bole had certain business transactions and relations with the defendant corporation, and that among such business relations were certain business transactions carried on under the name of the Bole Pump Company; denies that at any time complainant Robert E. Bole was indebted to said defendant corporation, in the sum

of Ten Thousand Dollars, or in any sum whatever in excess of Five Thousand Dollars; denies that on the first day of January, 1913, or at any time during January, 1913, complainant Robert E. Bole assumed an attitude or bitterness towards either of said defendants, or sent the alleged or any communication [44] to defendant Elihu C. Wilson, either of an insulting or defiant nature, either entirely uncalled for, or otherwise;

Complainants allege that the matters of business and the said Bole Pump Company's account between complainant, Robert E. Bole, and said defendant corporation, were settled by a contract in writing; denies that in the said pretended communication complainant Robert E. Bole, did for the first time, either unjustly, or falsely, or maliciously, or in any other manner assert to the defendants or either of them, a right or interest in or to said invention, the subject matter of said letters patent No. 1,080,135. On the contrary complainants allege that complainant Robert E. Bole continuously asserted that he was the inventor of said invention and that defendant Elihu C. Wilson had full knowledge of such invention by said Robert E. Bole and of said Robert E. Bole's claim as the inventor thereof, for years prior to January, 1913.

Complainants deny that on or about the first day of February, 1913, or at any time, complainant Robert E. Bole, either as alleged in defendants' alleged counterclaim or setoff, or otherwise, or at all, did withdraw or waive or agree to withdraw or waive any claim of right of invention or interest whatso-

ever pertaining to the said invention, or did covenant or agree at no time or in any manner to harm or injure, or cause harm or injury to said defendants, or either of them, in connection with said invention or in any way harass or trouble any of the defendants or either of them, in connection with the subject matter of said pretended letters patent in suit or any part thereof as alleged by defendants or otherwise or at all. [45] Admits that with the consent of complainant Robert E. Bole, and prior to January 1, 1913, defendants made or caused to be made and manufactured and sold a number of under-reamers or devices containing or embodying the said invention.

Complainants deny that in violation of the said alleged covenant alleged by defendants to form a part of the settlement between complainant, Robert E. Bole, and defendants, complainant Robert E. Bole did any act or thing whatsoever calculated to cause damage or injury to the defendants, or either thereof, or which has caused any damage or injury to defendants or either of them, either as alleged in said alleged counterclaim or setoff, or otherwise or at all.

Complainants deny that in the alleged interference proceedings pending in the United States Patent Office any proceedings have been had or taken conclusively tending to prove defendant Elihu C. Wilson, to be the original, first, or sole, or true inventor of the said invention. On the contrary, complainants allege that the said interference proceeding is still pending undecided and undetermined

in the United States Patent Office and that said Elihu C. Wilson voluntarily filed the alleged application for letters patent and caused said interference proceedings to be instituted;

Complainants deny that either of these complainants either within the Southern District of California or elsewhere, have issued or uttered any false or improper or damaging assertion or assertions, or any assertions whatever to the trade or in the field or elsewhere, that said Robert E. Bole and not said Elihu C. Wilson is the true, lawful, original, first, or sole inventor of said invention, either with or without any intent to damage or hurt or injure said defendants, [46] or either thereof or in violation of the alleged covenant, waiver or disclaimer alleged in said pretended counterclaim or setoff of defendants; complainants deny that any act of either of complainants in the premises has caused any damage or injury whatsoever to complainants, or either thereof.

Complainants deny that the defendants, or either thereof, have suffered damage or injury in the sum of Seventy-Five Thousand Dollars (\$75,000.00) or in any sum whatsoever by reason of any act of these complainants, or either thereof; deny that defendants, or either of them, are now suffering or will suffer great or irreparable damage or injury by reason of any wrongful act of these complainants, or of either of these complainants.

WHEREFORE complainants pray judgment of this Court that defendants take nothing by their alleged counterclaim or setoff and that complainants

have the relief prayed for in their Bill of Complaint herein.

ROBERT E. BOLE and
EDWARD DOUBLE,
By FREDERICK S. LYON,
Their Counsel.

FREDERICK S. LYON,
Solicitor and of Counsel for Complainants.

[47]

State of California,
County of Los Angeles,—ss.

Lora M. Bowers, being first duly sworn, deposes and says that she is a stenographer in the employ of Frederick S. Lyon and of legal age; that on Tuesday, February 23, 1915, she served the attached Reply upon Raymond Ives Blakeslee, solicitor for the defendants in the above-entitled suit at his office 728-30 California Building, in the City of Los Angeles, California, by handing to and leaving with Alfred Dahler, a draftsman in the employ of said Raymond Ives Blakeslee, a true and correct copy of said Reply, said Alfred Dahler being then and there in charge of the office of said Raymond Ives Blakeslee.

LORA M. BOWERS.

[Seal] WILLIAM W. BEARMAN,
Notary Public in and for the County of Los Angeles.

[Endorsed]: No. B-19. United States District Court, Southern District of California, Southern Division. Robert E. Bole and Edward Double, Complainants, vs. Wilson and Willard Manufacturing Company and Elihu C. Wilson, Defendants.

In Equity. Reply. Filed Feb. 24, 1915, Wm. M. Van Dyke, Clerk, By R. S. Zimmerman, Deputy Clerk. Frederick S. Lyon, 504-7 Merchants Trust Building, Los Angeles, Cal., Counsel for Complainants. [48]

[Interlocutory Decree.]

*United States District Court, Southern District of
California, Southern Division.*

IN EQUITY—No. B-19.

ROBERT E. BOLE and EDWARD DOUBLE,
Complainants,

vs.

WILSON and WILLARD MANUFACTURING
COMPANY and ELIHU C. WILSON,
Defendants.

This cause having come on for trial and final hearing before the Court on March 23, 1915, Frederick S. Lyon, Esq., appearing on behalf of complainants and Raymond Ives Blakeslee, Esq., and Frederick A. Stephenson appearing on behalf of defendants and the Court having heard the testimony of the witnesses on said day and on March 24, 1915, March 25, 1915, March 26, 1915, March 27, 1915 and April 12, 1915, and having heard and considered the arguments of counsel and the testimony and proofs produced upon behalf of the parties, it is ordered adjudged and decreed:

1. That complainant Robert E. Bole was the original, first and sole inventor of that certain new and useful under-reamer described, set forth and

claimed in letters patents of the United States No. 1,080,135, granted December 2, 1913; that the same was not known or used by others before his invention or discovery thereof or patented or described in any printed publication in the United States of America or in any foreign country [49] before his invention or discovery thereof, or more than two years prior to his application for said letters patent in the United States of America, or in public use or on sale in the United States of America for more than two years prior to his said application for said letters patent and not abandoned by him, and that neither said Robert E. Bole nor his legal representatives or assigns had prior to the filing of his said application for said letters patent of the United States, filed or made any application for letters patent thereon in any country foreign to the United States.

2. That said complainant Robert E. Bole, made due application in writing in due form of law to the Commissioner of Patents of the United States of America for letters patent upon the said invention, and on February 12, 1913, by an instrument in writing in due form of law duly signed by said Robert E. Bole, and by him delivered to complainant Edward Double, did sell, assign, transfer, and set over unto complainant Edward Double, an undivided one-half ($1/2$) part of the full and exclusive right, title and interest in and to the said invention and the letters patent to be granted and issued therefor, and did authorize the Commissioner of Patents of the United States of America to issue said letters patent jointly to Complainants, their heirs, legal representatives

and assigns; that thereafter said letters patent of the United States, to wit: No. 1,080,135, were on December 2, 1913, duly and regularly granted, issued and delivered by the Government of the United States of America to complainants; that there was thereby secured and granted to complainants for the full term of seventeen years from and after December 2, 1913, the sole and exclusive right, liberty and privilege of making, using and vending to others to be used the [50] said invention throughout the United States of America and the Territories thereof.

3. That the defendants herein, Wilson & Willard Manufacturing Company and Elihu C. Wilson, have on December 2, 1913, and on divers days and dates thereafter and prior and subsequent to the filing of the Bill of Complaint herein and within the Southern District of California, to wit, in the County of Los Angeles, California, made and sold to others to be used, and are now making and selling to others to be used, under-reamers embodying, containing and embracing the invention described, set forth and claimed in and by said letters patent No. 1,080,135, without the license or consent of complainants or of either of complainants and in violation and in infringement of said letters patent and of each of the claims thereof; that the so-called Wilson improved under-reamer like "Defendants' Exhibit 1" manufactured and sold by defendants were and are infringements upon said letters patent and each of said under-reamers contained or contains in it the said patented invention.

4. That complainants are the owners of said letters patent and of the full and exclusive right, title and interest therein and thereto and that defendants and each of them have at all times had full knowledge and notice of said letters patent and of the rights of complainants therein and that the manufacture and sale by them of said so-called Wilson improved under-reamers was an infringement upon and violation of said letters patent.

5. That complainants recover of the defendants and each of them the profits, gains and advantages which defendants and each of them have or has derived, received or made by reason of said infringement, and that complainants recover of the said [51] defendants and each of them any and all damages which complainant or either of them have or has sustained or shall sustain by reason of said infringement by defendants or either of them.

6. And it is hereby referred to Lynn Helm, Esq., as Master of this court, who is appointed *pro hac vice*, to take and state the account of said gains, profits and advantages and to assess such damages and to report thereon with all convenient speed, and the said Wilson & Willard Manufacturing Company and Elihu C. Wilson, their attorneys, officers, clerks, servants, agents, workmen, associates and employees are hereby directed and required to attend before said Master from time to time as he may require and to produce before him such books, papers, vouchers, documents, records or other things and to submit to such oral examination as the Master may require.

7. That a perpetual injunction issue out of and

under the seal of this court directed to the said defendants Wilson & Willard Manufacturing Company and Elihu C. Wilson, their and each of their officers, attorneys, agents, servants, workmen, clerks and associates, enjoining and restraining them and each of them from directly or indirectly making or causing to be made, using or causing to be used, selling or causing to be sold, or otherwise disposing of in any manner any under-reamer or device containing or embodying or employing the said invention granted and patented in and by said letters patent No. 1,080,135, or any device or machine capable of being combined or adapted to be used in infringement of said letters patent or of the claims thereof in any manner whatsoever, and from making or causing to be made, using or causing to be used, selling or causing to be sold or otherwise disposed of in any manner any machine like the [52] so-called Wilson Improved Under-reamer in evidence in this cause.

8. That defendants take nothing under defendants' alleged counterclaim herein and judgment thereon is hereby rendered in favor of complainants and against defendants, and each of them.

9. That complainants do have and recover judgment against defendants, Wilson & Willard Manufacturing Company and Elihu C. Wilson, and each of them, jointly and severally, for the sum of One Hundred Five and 15/100 (105.15) Dollars, complainants' costs and disbursements of this suit, and that the further questions of increase of damages be reserved until the coming in of the Master's report.

Dated at Los Angeles, California, April 16th, 1915.

OSCAR A. TRIPPET,

District Judge.

Decree entered and recorded April 16, 1915.

WM. M. VAN DYKE,

Clerk.

By Leslie S. Colyer,

Deputy Clerk.

[Endorsed]: No. B-19—Eq. United States District Court, Southern District of California, Southern Division. Robert E. Bole and Edward Double, Complainants, vs. Wilson & Willard Manufacturing Company and Elihu C. Wilson. In Equity. Interlocutory Decree. Filed Apr. 16, 1915. Wm. M. Van Dyke, Clerk. By Leslie S. Colyer, Deputy. Frederick S. Lyon, 504-7 Merchants' Trust Building, Los Angeles, Cal., Counsel for Complainants. [53]

[Opinion.]

In the United States District Court, Southern District, State of California.

IN EQUITY.—No. B-19.

ROBERT E. BOLE and EDWARD DOUBLE,
Complainants,

vs.

The WILSON & WILLARD MANUFACTURING
COMPANY and E. C. WILSON,
Defendants.

Tuesday, April 13, 1915, 10 o'clock A. M.
(After argument by defendant's counsel.)

The COURT.—In the case on trial I do not care

to hear any further argument. I have carefully considered the evidence, and listened patiently to the arguments of counsel for the defense. I am thoroughly convinced that the complainant, Bole, invented the key in controversy, and is justly entitled to a patent. If there had not been a patent issued in the case, or if the patent had been issued to the defendant, I should decide this case in favor of the complainant Bole.

There has been a good deal of criticism indulged in concerning some of these witnesses who have testified in favor of Bole, particularly Adams and Heber. I do not see any reason for their being criticised. If a man wants to fix up evidence it seems to me that he would fix up evidence more material than those witnesses were able to testify to. In regard to the drawing that has been introduced in evidence, and which has been criticised as a fabrication. If Mr. Bole wanted to fix up evidence for the purpose of perjuring himself, and to have other [54] people perjure themselves, he would have gotten evidence along that line that was more material. Of course, these are material in a way, but they are not, in any sense, controlling.

Mr. Bole has been criticised for not being industrious and active in his application for a patent. Nothing was done with it from the time he conceived it in his mind and suggested it to these witnesses who have testified in his favor, except to write the letter to Mr. Willard, sometime prior to 1911. In that letter he asked that practical use be made of the conception, but the defendant would not adopt the inven-

tion. The complainant Bole was not in the business of manufacturing reamers; he could not put the conception to practical use without going to competitors of his business associates, Wilson & Willard Manufacturing Company. He was not in a situation to put it into practical use until his relations with that company were severed. He applied to the defendant to put the key into use. Of course, until it was tried out it would be nonsensical to apply for a patent. He had no opportunity to apply for a patent, associated as he was with Wilson & Willard, unless they would try it out. I think that entirely excuses his delay down to 1911. From that time on the key was put into practical use, and kept in use until the patent was applied for, within two years. From the time of the use of the key, if there is any negligence attributable to anybody for not applying for a patent sooner, Wilson was as negligent as Boles; probable more so. He was more interested in it, probably, if he was the inventor, than Bole was. He does not make any explanation why he waited nearly two years to apply for a patent. The letter that Bole wrote to Wilson, when he got into a controversy with him, is, it seems to me, the most natural thing in the world for him to do, in that he makes claim that he will not let Wilson use the invention any longer, or words to [55] that effect. I think it was a very unnatural and unusual thing for Mr. Wilson to do,—if he claimed to be the inventor of that key,—to make a settlement with Bole, without including in that settlement the controversy concerning the key. It was very unbusinesslike and very unnatural.

I have not the slightest doubt about how to decide this case, and I decide it in favor of the complainants.

[Endorsed]: No. B-19—Eq. U. S. District Court, Southern District of California. Robert E. Bole and Edward Double, Complainants, vs. The Wilson and Willard Manufacturing Company, and E. C. Wilson, Defendants. Opinion of Court. Filed Apr. 24, 1915. Wm. M. Van Dyke, Clerk. By T. F. Green, Deputy Clerk. [56]

*In the United States District Court Within and for
the Southern District of California, Southern
Division.*

IN EQUITY—No. B-19.

ROBERT E. BOLE and EDWARD DOUBLE,
Complainants,

vs.

WILSON & WILLARD MANUFACTURING
COMPANY and E. C. WILSON,
Defendants.

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*In the United States District Court Within and for
the Southern District of California, Southern
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IN EQUITY—No. B-19.

ROBERT E. BOLE and EDWARD DOUBLE,
Complainants,

vs.

WILSON & WILLARD MANUFACTURING
COMPANY and E. C. WILSON,
Defendants.

Tuesday, March 23, 1915.

APPEARANCES:

FREDERICK S. LYON, Esq., Counsel for
Complainants.

RAYMOND IVES BLAKESLEE, Esq., and
FREDERICK A. STEPHENSON, Esq.,
Counsel for Defendants.

~~The COURT.—Bole vs. Wilson & Willard Manu-
facturing Company.~~

Mr. LYON.—The complainant is ready.

Mr. BLAKESLEE.—The defendant is ready. In
that case I wish to ask that there be associated with
me as counsel for the defendants, Mr. Frederick A.
Stephenson, a member of this bar.

The COURT.—I believe the order should be that
there be a substitution of attorneys, of yourself and
Mr. Stephenson instead of yourself. Is that not the
usual order, Mr. Clerk?

The CLERK.—That is the usual order.

~~Mr. BLAKESLEE. Mr. Stephenson will not be~~

STRIKEN, PER ORDER OF APRIL 26, 1915.

~~STRICKEN, PER ORDER OF APRIL 26, 1915.~~

~~thereby made solicitor of record, but we will both~~
be counsel of record.

The COURT.—Oh, I do not know whether that distinction is maintained under the new rules or not. I think under the [60*—1†] new rules there is no distinction of that kind maintained. Still, I am not as familiar with the matter as I ought to be, I suppose.

Mr. BLAKESLEE.—In this case, your Honor, we have an offer to make. The suggestion was made by counsel for complainant that this case be tried upon the record made in the United States Patent Office in the interference between the complainant Bole, and the defendant Wilson, pertinent to an issue raised in this suit, namely, the issue as to priority of invention. The party Wilson having an application pending in the United States Patent Office in interference with the patent of the complainant Bole, as to which we argued, as your Honor will remember, last week on motion for continuance, we now wish to make formal offer that the proofs in that case and record in that case with the exhibits, which I understand have come from the Patent Office, be filed in this case and that this case be determined upon such records and proofs and exhibits, with the additional submission of briefs or argument, as your Honor may desire.

Mr. LYON.—Counsel having over three weeks ago refused to so stipulate, we decline to so stipulate at the present time.

*Page-number appearing at foot of page of certified Transcript of Record.

†Original page-number appearing at foot of page of Testimony as same appears in Certified Transcript of Record.

STRICKEN, PER ORDER OF APRIL 26, 1915.

~~Mr. BLAKESLEE.—I may state further that I~~
have been informed by wire that that matter has been concluded in the Patent Office, at least before the first tribunal, and a decision has been rendered and the situation has somewhat changed. Therefore, we make that offer now for what consideration the counsel may want to give it.

The COURT.—The offer and stipulation seems to be declined and the Court has no power to enforce it. I would like for counsel to state briefly and yet clearly enough for me to understand, the issues, before we start into the trial.

Mr. LYON.—Appearing on behalf of the complainant, I will state that this is the usual suit for infringement of a patent, [61—2] for an injunction, and for an accounting of profits and damages, the bill being in the usual form setting forth that Robert E. Bole was the inventor of a certain improvement in under-reamers; that he made due application to the United States Patent Office as provided in the statutes for letters patent upon such invention; that such application was made and duly filed in the United States Patent Office on February 19, 1913. Pausing there for a moment, the answer admits the filing of that application at that time. That will be one of the material admissions of the answer to which your Honor's attention will be particularly directed during the trial. Of course, the defendant does deny that that application was anything but a fraudulent application; but he does not deny that the application was made and made in due form of law. That thereafter and before the

~~issuance of the patent the complainant and inventor~~

Bole assigned an undivided one-half interest in the invention to Edward Double of this city; that thereafter, and on December 2, 1913, letters patent of the United States No. 1,080,135 were duly granted and issued to Mr. Bole and Mr. Double, for said invention. That allegation is not denied save and except as to the conclusion that it was duly granted.

The next allegation of the Bill of Complaint which is material here is the allegation that the defendants Wilson & Willard Manufacturing Company and Elihu C. Wilson have been since the granting, issuance and delivery of said letters patent, and without the license or consent of the patentees, or either of them, making, using and selling under-reamers embodying this invention. The answer in that respect admits that both of the defendants have since the issuance of the patent been making, using and selling under-reamers embodying said invention. They allege that consent or license is not necessary. I am going through these particular allegations for the moment, to show your Honor that there is only one issue in the case, and I will come to what the [62—3] invention pertains to in a moment. The answer also admits that the defendants intend to and have been continuing to manufacture, use and sell in the United States of America and in the Southern District of California under-reamers embodying the invention set forth, described and claimed in the said letters patent. The defense in this case is that Robert E. Bole was not the original or sole inventor of said invention, but that Elihu C. Wilson,

~~STRICKEN, PER ORDER OF APRIL 26, 1915.~~

~~one of the defendants, was the inventor. Stripped~~
of all verbiage, that is the issue in this case.

The COURT.—What is that?

Mr. LYON.—That instead of Bole being the inventor that Wilson was the inventor, and that Mr. Bole's application was a fraudulent application, he knowing that Wilson was the inventor, and that he filed the application for that which he knew to be Wilson's invention. There is, perhaps, another defense urged, that is, that at the time when in 1913 certain settlements were made between the Wilson & Willard Manufacturing Company and Robert E. Bole, Bole agreed that the Wilson & Willard Manufacturing Company could continue the use of the invention. That is a separate and distinct defense. There is an alleged counterclaim, which so far as complainants are concerned, is immaterial to state at this time, but it is based upon an alleged circularization of the trade that the Wilson & Willard Manufacturing Company were infringing the Bole patent. As to such counterclaim, when it is urged we shall raise the objection that it is not a counterclaim under the statute or under the new Equity Rules; that it is a counterclaim over which this Court has no jurisdiction, if it be a counterclaim.

The COURT.—That is, you regard it as a trespass?

Mr. LYON.—Yes. Furthermore, and particularly, that it is a matter which even if it were a cause of action under proper circumstances, it is one which until they have succeeded in [63—4] getting a patent, states no cause of action.

~~STRICKEN, PER ORDER OF APRIL 26, 1915.~~

~~As outlined in my statement of the case, your~~
Honor will see that in this case the burden of proof is on the defendant all the way through. It will only be necessary under these allegations for us to offer in evidence the original letters patent granted to us, as they are *prima facie* valid and as they prove all of the antecedent steps, the application for patent, the assignment, and the issue of the patent. As the use by the defendants is admitted and their intention to continue to use is admitted, there is no need of evidence as to that. There is no need of evidence as to the use by the defendants or either of them being against the complainants' will or without their license or authority, for that is admitted. So our case is made when we offer in evidence the original letters patent. The defense is entirely an affirmative one and under the statutes must be proven beyond a reasonable doubt.

The COURT.—Is that your statement, that it must be proven beyond a reasonable doubt?

Mr. LYON.—Any defense to a patent must be proven beyond a reasonable doubt—any affirmative defense against the validity of the patent. That is a general rule of law. There are only one or two decisions which say “by convincing proof,” but our Circuit Court of Appeals have used the term in two or three cases recently “beyond reasonable doubt,” and I will call your Honor's attention to those decisions.

The invention involved in this case is an extremely simple one. It does not involve the whole of the under-reamer. ~~An under-reamer perhaps your~~

STRICKEN, PER ORDER OF APRIL 26, 1915.

~~Honor is familiar with such a tool~~ is a device used in the drilling of oil wells by the so-called standard or cable-tool system, in which system the hole is made by a reciprocation of the string of tools upward and downward, and the dropping of the tools on the bottom of the hole grinds [64—5] up the earth or earthy matter into a fine dust or mud, when mixed with water, and by that means the hole is made, and by the baling out of the muddy water the detritus is removed from the hole. In California and in some other portions of the country, due to the fact that the earth is not of rock formation as in Pennsylvania and some portions of West Virginia, and so forth, it is necessary to case off or enclose in pipe the hole. In other words, to put a pipe down or casing down to make the wall of the well stand up and prevent caving in. So that the casing is carried down as the drilling progresses. In this part of the country hard strata of shale or ledges of rock, shunks of boulders sticking in the patch of the hole, must be drilled. When using the cable-tool system, the ordinary drilling bit is necessarily, then, of smaller diameter than the casing through which it has been moved to the bottom of the well. The casing during the drilling is held up from the bottom of the well hole a suitable distance.

The COURT.—What is that?

Mr. LYON.—The casing in the well hole with this method of drilling is held up from the bottom or undrilled portion a suitable distance, anywhere up to sometimes 40 feet, to allow the drop, and the drill cuts only a hole smaller than the casing through

~~STRICKEN, PER ORDER OF APRIL 26, 1915.~~

~~which it has been entered into the hole. A device~~ therefore is necessary when we come to the hard shell formations or rock, or where there is a boulder sticking in the way, to under-ream or cut out the hole below the casing larger than the casing, and that is an expanding bit which would expand out after it has been lowered through the casing and it will make the hole larger than the casing to allow the well pipe to be lowered. That kind of a device is called an under-reamer.

In this suit we are not interested in or concerned with any portion of the under-reamer save one feature of it. An under-reamer, [65—6] as you may have noticed from following my remarks, is broadly a device made so that the bits will expand out and cut the hole larger than the hole through which the under-ream has come. Now, it is necessary, of course, when that bit is brought back out, that those cutters, or bits as they are sometimes called—sometimes called knives—shall again contract so as to come up through the casing. Constant use of those bits dulls them and they must be resharpened. They must also be kept out to size, or the under-reamed portion of the hole will taper down until the casing cannot follow. So that in under-reaming, and with the use of the tool, such a tool must be provided as can be readily dissembled or taken apart, and taken apart so that the cutters can be taken out and either new cutters put on or those resharpened which have been used in the device.

As the evidence in this case will disclose, under-reamers have been in use for years in California

~~STRICKEN, PER ORDER OF APRIL 26, 1915.~~

~~prior to this invention. The Wilson & Willard~~
Manufacturing Company had been manufacturing the Wilson under-reamer. It had been manufactured from 1904 or five to 1911 before this invention was produced. The object of this invention was to simplify and perfect the removal of the spring-actuated parts and the moving parts used in expanding the bits and drawing the bits back into expanded position to allow their projection into and through the well casing and drawing back out of the well casing.

The COURT.—State that over again.

Mr. LYON.—The object of this invention was to simplify those parts of the under-reamer which permitted the ready removal of the bits and connecting the bits with the spring-actuated parts which actuated the bits in expansion and contraction. I will illustrate that by one of the reamers which can be taken apart in a moment. The invention relates solely in this case, so far as the Court need give it any consideration, to simply the device for holding and releasing those parts. [66—7]

Mr. BLAKESLEE.—We have produced a specimen of our manufacture alleged to infringe, and will stipulate when the time comes that we have been making and selling it.

(Mr. Lyon thereupon goes to the reamer in question and dismantles it and explains it to the Court.)

Mr. LYON.—As I said before, the invention of the patent in suit pertains solely to the ready means for releasing the cutters or bits and the spring-actuated rod and spring, so that the bits may be readily taken

~~off or readily put on in place.~~

The COURT.—What do you mean by “actuated”?

Mr. LYON.—“Actuated,” in that sense, is the fact that when the tool slides out of the end of the casing at the bottom of the well, automatically then this spring that is in there draws the bits up and outward into expansion. In other words, it is the actuation of the bits from the position which we showed your Honor when they were drawn down out to their expanded or reaming position. We neglected to show your Honor on that device the fact that each one of those bits is provided with an outward shoulder which contacts with the lower portion or end of the well casing, so that when it is desired to draw the tool out the casing holds against the bit until the bits have drawn down against the tension of the spring and drawn to a collapsible position, and allow the whole tool to go through the casing.

With that opening statement the complainants offer in evidence letters patent of the United States.

The COURT.—Hadn't I better hear from the ~~other side?~~

Mr. LYON.—~~This is our complete case and they can make their statement afterwards.~~ We offer in evidence letters patent of the United States No. 1,080,135, dated December 2, 1913, issued to Robert E. Bole and Edward Double for under-reamers.

(Exhibit marked Complainant's Exhibit “A.”)

Mr. LYON.—Complainants rest. [67—8]

Mr. BLAKESLEE.—Does your Honor desire that I should explain that structure to you before we go on?

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~~The COURT.—I think I understand it. I flatter myself that I understand the mechanism of it.~~

Mr. BLAKESLEE.—Our defense is, you Honor, the invention having been set forth and we having admitted that we used the invention and having admitted—

The COURT.—You used this thing that they have a patent on?

Mr. BLAKESLEE.—We used it, lock, stock and barrel, the whole thing, and we do not deny that the subject of that patent is an invention. In fact, we admit that. We do not attack the validity of the patent upon the ground that it does not cover a patentable invention within the statutes. The statute, section 4886, prescribes those things which are patentable. But we make the defense and present the defense, first, that Bole, the patentee, was not the inventor in any respect, was not the sole inventor, nor the original inventor, nor the true inventor; and the further defense that—the first defense rather resting upon the fact that the thing was old when he applied for a patent. Now, the statutes provide that a thing must be new and useful to be patentable. A thing may be used by the inventor up to a period of two years prior to the time he applies for a patent and still the patent would be valid in spite of such prior use. If used over two years it will not be valid, and he cannot properly apply. We contend as our first defense that this reamer with this key in had been manufactured, sold and used by the defendant corporation and the defendant Wilson for

~~a period of over a year and a half before Bole applied.~~

The COURT.—A year and a half?

Mr. BLAKESLEE.—Over a year and a half.

The COURT.—It did not reach the two years?

Mr. BLAKESLEE.—It did not reach the two years. But, as I shall [68—9] be able to show your Honor, if the invention had been embodied in a working construction and only one working construction prior to the date of his application, and that working construction had been a successful working construction, his patent would be invalid if he could not prove that he had made the invention prior to the reduction of the invention to practice or the completion of this successful working thing.

The COURT.—State that again. I don't know whether I understand you.

Mr. BLAKESLEE.—It is a proper defense to a patent suit in attacking the validity of the invention to show that a single specimen of the thing patented had been produced prior to the date of the application for the patent. In other words, that the invention had been made—

The COURT.—By someone else.

Mr. BLAKESLEE.—By someone else, prior to the date of the application.

The COURT.—And had been successfully used.

Mr. BLAKESLEE.—And had been successfully used or was a successful embodiment of the invention. We therefore, as our first defense, contend that the patent in suit is invalid on the ground that the element of novelty was lacking when Bole applied for—

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~~the patent. In other words, that the invention had been manufactured and sold and successfully used with the knowledge of the patentee, the applicant, for over a year and a half prior to the time he applied. Now, that defense is really separate and distinct from the other defense that the defendants, Wilson & Willard Manufacturing Company and Wilson, who so produced and sold and caused the successful operation of these under-reamers were, per the defendant Wilson, the inventors and originators of this key. There is a distinction there. Wilson might have gotten his information of this thing from abroad or from [69—10] some source of origination apart and distinct from himself, in which case he could not enter and this court could not entertain the defense, that he, Wilson, was the real inventor or originator of this invention. But in this case we have the defense and make the contention that Wilson was the originator of this invention, and not Bole, and that is our second defense. Our third defense is that Bole at the time of a certain settlement with the defendant did by covenant, agreement and waiver put himself into such a position that he is estopped to urge the claim of infringement or to ask for an accounting for damages or an injunction against these defendants.~~

As to the second defense that Wilson was the original inventor, it remains to be stated briefly that the defendant Wilson filed an application for a patent on this same invention. That matter we went into to some extent last week on the argument of the ~~motion for a continuance of this case. That applica-~~

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~~tion by the defendant Wilson was filed by him~~
twenty-seven days after the application for patent was filed by the complainant Bole. The application by Bole was filed February 19, 1913, and the application by the defendant Wilson was filed March 18, 1913. Those applications were copending in the Patent Office in the neighborhood of eight months prior to the issuance of the patent to Bole.

It is customary and provided for under the rules of the Patent Office to declare what is known as an interference proceeding or proceeding whereby shall be established the priority of the invention as between two conflicting applications, or between an application and a conflicting issued patent. It is the practice of the Patent Office to declare these interference proceedings so that these questions of priority or questions directed to the determination as to which of the two or more parties claiming the same invention was the original inventor, before any patent [70—11] issue to either of such parties on such invention. The authorities in the Patent Office were derelict in the performance of their duty, or, at least, showed an inadvertence and an improper attention to the applications pending for this particular device, in that they did not declare such in interference proceeding. In fact, the patent to Bole was issued before this interference proceeding was declared, and it was only declared after we had called the attention of the Patent Office to the fact that this Bole patent had slipped through the office without any such declaration of interference being made, in spite of the ~~fact that both parties applicant were claiming the~~

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~~same invention, that the disclosures and drawings~~
were almost identical, and, in fact, we shall show that
the drawings of the Bole application were made from
a specimen of reamer produced by the defendant.
So that the Bole patent was issued inadvertently and
by mistake, and without a determination of this ques-
tion of priority, and it is because of that inadvertence
and mistake or oversight on the part of the Patent
Office that the complainant now has the slight vestige
of advantage over the defendant in that he has a
patent. If the Patent Office had proceeded in the
usual course as to these interfering applications, an
interference proceeding would have been instituted
before the Bole patent issued and only one patent
would have been issued by the Patent Office. Now,
if Wilson prevails in the interference proceeding
which is now pending between his application and the
Bole patent, a patent will of necessity be issued in due
order of business to the defendant Wilson and then
a proceeding will have to be brought under Section
4918 of the Revised Statutes in this court to ask for
the cancellation and voiding of one of such patents.
Now, it follows that if that interference had been
duly declared this suit could not have been brought
until a determination of the issues of that inter-
ference, and it might never have been brought, [71—
12] and would never have been brought if the party
Wilson had prevailed. I am not able to state with
a proper showing from the standpoint of what is
proper evidence that that interference proceeding
has been determined before the tribunal of first resort
~~and that the party Wilson has prevailed. But I have~~

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~~a telegram received yesterday from my associate in Washington which is as follows: "Interference—"~~

Mr. LYON.—If your Honor please, in that connection, as we shall have an objection as to the proper evidence of these facts, I do not think it is competent for the Court to hear secondary recitals of that fact. My position is that if there is any such decision, a certified copy of the decision should be presented; and, furthermore, I shall object to such copy of such decision on the ground that the same is not final and that it is not even a decision and no judgment, and, further, that it is not binding on this Court and that it is the duty of the Court to independently judge this question, as I argued before, and I object to counsel reading something which he cannot file in evidence in Court. [72—13]

The COURT.—I don't think those telegrams are admissible in evidence.

Mr. BLAKESLEE.—I am not offering them in evidence, and I didn't assume counsel would take the position that the usual course of business as between our associates in Washington and ourselves as to advice as to the termination of proceedings there was improper to refer to in presenting a case in an opening statement. This is not offered as evidence, and if counsel wishes to be captious about that we will not say anything further about it. As a matter of fact, I have ordered a certified copy of the decision rendered in the Patent Office last Saturday in favor of the defendant Wilson —

Mr. LYON.—I object to the statement that there was such a decision.

~~The COURT.—Of course the Court will disregard it unless it is introduced in evidence.~~

Mr. BLAKESLEE.—All I wish to say is that I hope to have a certified copy of the opinion in time to offer it in this case, prior to the conclusion of the argument. I do not ask consideration of the matter formally until that arrives. But I am pointing out the general situation here, and am rather surprised at an objection to the formal statement that that decision has been rendered. So that we have here, aside from the defense of estoppel, two defenses, which, as we shall contend, absolutely prevent the prevalence of the complainant's case here, namely, that there was no originality in and to this invention—which we admit was at one time an invention—at the time that Bole filed his application. And we furthermore shall show that this invention, embodied in these reamers, the product of complainants, was, with full knowledge of the complainant Bole, *was* put forward and used by the defendant Wilson; that such procedure went on, without protest, until the time of a certain settlement of [73—14] accounts between the party Boles and the defendants.

The COURT.—What materiality has that, unless it had been used for two years?

Mr. BLAKESLEE.—The materiality is this, as we shall show by decisions, that the contention being made that the party defendant Wilson was the inventor, all of the surrounding circumstances and the actions of the parties are material to show diligence or lack of diligence on the part of the respective parties. ~~Our contention will be that if Bole had this~~

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~~invention before it was reduced to practice by Wilson,~~
he was not diligent in any respect; and, on the contrary, we shall show that the party Wilson, immediately he produced this invention and independently produced it, put it into practice, embodied it into working structures, and sold those structures. The law requires of an inventor that he be diligent; and your Honor will be shown by the decisions that the law is not concerned so much in determining who was first man to produce a thing who diligently proceeded to give it to the public. Decision after decision will be directed to your Honor's attention which establishes the legal principle that the first man to produce a thing will not be entitled to a patent for it if he sleeps upon his rights and if during his slumbers another man who is diligent enters the field, produces the invention, reduces it to practice, and gives it to the public. The object of patent laws is to foster invention and build up the arts and industries, and, to that end, the man who is diligent in producing the invention and giving it to the public is the man to receive the reward of a monopoly for a period of seventeen years; and the further object of the law is to give this invention to the public, for its undisturbed and monopolist's use as long as possible, namely, for the period of seventeen years after patent. So that we contend it is material to show that while this complainant Bole [74—15] claims that he was the originator of this invention, he stood around and cooled his heels for a year and a half and watched the defendant Wilson put the thing on the market and give it to the public, without protest, and

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~~that then, peeved and huffed because he was forced to~~
settle an account and advisedly settled it at substantially half its face value, rushed to a patent attorney and gave somebody an assignment on the promise to back him up in these controversies. So that that constitutes our second defense, namely, that Bole, in addition to not being the inventor, because the thing was old when he applied for patent, and not the inventor in fact because he didn't originate the invention, and because the defendant Wilson did invent the invention and was diligent about its exploitation. So that we do not attempt to avoid this charge of infringement by any divergence between the subject matter of the patent and the defendants' structures, and are willing to concede and stipulate that the defendants are making, and have since the issuance of the patent been making, and intend and threaten to continue to make, the reamers embodying this invention. And, as I have suggested, we will show that they made them long before the party complainant Bole applied for the patent in suit.

Our contention is that the party Bole surreptitiously applied for and obtained this patent, and that he fraudulently obtained it, and that the patent must be found to be invalid and of no force and effect in law because of the defenses presented.

I wish to state, a little further, your Honor, that we shall show, by numerous decisions of the courts, that the decisions of the Patent Office on questions of this sort, questions pertinent to priority of invention, while not controlling upon the courts, are highly persuasive; and, ~~in answer to complainant's counsel's~~

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~~indication that he will object to the filing of a certified~~
copy of the decision referred to, on the ground, as I
take it, that [75—16] it may not be the ultimate
decision of the Patent Office, that is immaterial, for,
if the party Bole does not appeal from such decision
as rendered by the primary or lower tribunal, in the
Patent Office, that will be the decision of the Patent
Office—the same as the decision of this Court is the
decision of this forum irrespective of appeal. So
that we will attempt to convince your Honor that the
decisions of the Patent Office on these questions con-
stituting this defense of want of priority or origin-
ality are highly persuasive upon these courts, both
jurisdictions being of equal order and the jurisdic-
tions being concurrent; and particularly in view of
the fact that the Patent Office tribunals which con-
sider these matters are especially and technically
ordered and organized to handle these matters.

The COURT.—I think you are debating your case
instead of presenting a statement of what your de-
fense will be.

Mr. BLAKESLEE.—It may be I have gone be-
yond the proper bounds of the first presentation of
the case; but I merely wished to state the difference
between this tribunal and the other which has had the
matter before it.

Mr. LYON.—In reply, in order that the Court may
know the facts which we will present, and not—and
not an argument at this time—I will state that I dis-
agree with counsel on his law. I understand your
Honor to wish an opening statement of the facts only.

~~The COURT. Yes, sir.~~

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~~Mr. LYON.—I will state that we will show that~~

long prior to the alleged use by the defendants of this device, it was invented by Robert E. Bole; and it will develop that the one question for your Honor to determine in this case is whether Bole or Wilson was the prior inventor, and who originated the invention at some time in January, 1911; and that, in rebuttal, we shall carry back, under the rule of law permitting to do so. [76—17] the invention of Robert E. Bole back of his application date, and show that he invented the device as early as 1908. Now, that will be our rebuttal testimony, except the argument. And that Wilson had full knowledge of such invention long prior thereto.

Mr. BLAKESLEE.—In order to make the issue there, preliminarily, distinctly, and clearly, we shall attempt to show the Court that the complainant's patent to Bole never was in possession of this invention before the time when the party Wilson produced it and put it into operation, and that, on the contrary, the complainant patentee Bole got all his information of the invention from the defendant party applicant Wilson.

The COURT.—Your defense is presented by amended and substituted answer?

Mr. BLAKESLEE.—That in part. Oh, there is a further amendment to the answer, permitted, which supplements the amended and substituted answer. Permission was given to amend the answer. And the defenses are the same. There is a little elaboration in the amendatory matter. And there is the counter-claim of which counsel speaks arising under the new

~~rules, and under which we contend the defendants have been injured and damaged to the sum of \$75,000 in and by these controversies and false representations in the field and in the trade in respect to the origin and ownership of this invention.~~

~~(Pleadings referred to.) [77 18]~~

[Testimony of E. C. Wilson, for Defendants.]

E. C. WILSON, one of the defendants, called by and on behalf of the defendants, being first duly sworn to testify the truth, the whole truth and nothing but the truth, testified as follows:

~~Mr. BLAKESLEE. I understand, your Honor, that exhibits have come from the Patent Office, upon the joint request of complainant, and defendant, which will be necessary to be used in this case, and I ask, if the clerk has those, that they be made available, so that the witnesses may select from them such exhibits as they wish to use in the course of their testimony. I have not seen those. Are those the exhibits?~~

The CLERK.—Yes.

(Exhibits produced.)

~~Mr. LYON.—They ought to be checked as we go along. The clerk had better note, when he hands them out, what he hands out.~~

Direct Examination.

(By Mr. BLAKESLEE.)

Q. Please state your full name, age, residence and occupation.

A. Elihu C. Wilson. Forty-four years old. 734 Berendo Street, Los Angeles, California. President of the Wilson & Willard Manufacturing Company.

(Testimony of E. C. Wilson.)

Q. What is the business of that concern, Mr. Wilson?

A. We manufacture all our tools and machinery, pumping machinery—our own patents, chiefly.

Q. How long have you been engaged in that general line of business?

A. I have been associated with iron works since the year 1897, whose business it has been to manufacture oil well tools [78—19] and machinery.

Q. Prior to your connection with that business, had you had any training, technical or otherwise, for such manufacturing work? And, if so, what?

A. No, sir; not prior to 1907—1897, I should say.

Q. Had you had, or not, an academic training before going into the manufacturing business?

A. Yes, sir; I had had a fairly good education.

Q. Briefly what?

A. Public school education, and training in the university.

Q. What university? A. Stanford University.

Q. Where is your present business located?

A. On 15th Street near Santa Fe Avenue, in this city.

Q. How long has it been located there?

A. For about six years.

Q. Can you mention any other kinds of oil well apparatus than those you have stated which you were manufacturing?

A. In addition to this under-reamer we were manufacturing the Wilson Casing Spear, the Wilson Casing Elevators—both of which are my inventions—

(Testimony of E. C. Wilson.)

and we are manufacturing a circulating-head invented by Mr. Willard, and manufacturing a pitman invented by my brother, and manufacturing a double-acting deep well pump, which is also an invention of my brother's, W. W.

Mr. LYON.—I move to strike all that portion of the answer, and each part and parcel thereof, from the record and exclude it from consideration, which pretends to say that any one of these devices was invented by some particular person, on the ground it is incompetent, not the best evidence, and hearsay.

The COURT.—(After argument.) I will sustain the motion, so far as it goes to who invented these things, anyway.

Q. (By Mr. BLAKESLEE.) What is your connection with this [79—20] business of the Wilson Manufacturing Company, officially or otherwise?

A. I am president and manager of the institution.

Q. And who controls the business of that company as to ownership?

Mr. LYON.—Object to that as calling for the conclusion of the witness; incompetent.

Mr. BLAKESLEE.—I wish to show the relations that have existed in connection with the ownership of this company, and the dealings between this company and the complainant Bole.

The COURT.—Objection overruled.

A. I do.

Q. (By Mr. BLAKESLEE.) As to the under-reamer business of the defendant company, is that a business, and has it been from the beginning of the

(Testimony of E. C. Wilson.)

business, that that company has principally, or what has been the situation in that respect, and your relation to that business?

Mr. LYON.—We object to that as leading, and as irrelevant, immaterial and incompetent, and calling for the conclusion of the witness and not for a statement of the facts.

Mr. BLAKESLEE.—We wish to show that this has been the business of this defendant, to lay the proper foundation that the party Bole, when he was associated with this defendant, had no interest in and to this reamer business pertinent to the invention.

The COURT.—Objection sustained.

Q. (By Mr. BLAKESLEE.) Prior to manufacturing under-reamers at the present place of business of the defendant company, had such under-reamers been manufactured by you or on your behalf at any other place or by any other concern?

Mr. LYON.—That is objected to as leading, and as incompetent, calling for the conclusion of the witness, and as ambiguous and indefinite—particularly as to the use of the term “such under-reamers.”

[80—21]

Mr. BLAKESLEE.—We wish to show the genesis of the invention; and the reamer has not been defined, excepting in general terms, so far.

The COURT.—I don't see any materiality in it; but I will let this go in at present. Overrule the objection.

A. The Wilson & Willard Manufacturing Company's plant had occupied another building on Cen-

(Testimony of E. C. Wilson.)

tral Avenue near 9th Street, and at that place we manufactured Wilson under-reamers.

Q. (By Mr. BLAKESLEE.) And prior to that time? A. Prior to that time.

Mr. LYON.—Same objection.

A. (Continuing.) They had been manufactured to a very considerable extent in the plant of the Bakersfield Iron Works, in Bakersfield, Kern County, California.

Q. (By Mr. BLAKESLEE.) Who was in charge of those iron works?

A. I was in charge of that plant at that time.

Q. How long have under-reamers been manufactured by you or on your behalf with some device or means for holding the lower end of the spring surrounding the movable rod in the body of the reamer?

Mr. LYON.—Object to that as leading, irrelevant, immaterial and incompetent for any purpose in this case at the present time; no foundation laid.

The COURT.—I will overrule the objection.

A. The first reamer I had manufactured was made by the Baker Iron Works of this city, in the early part of the year 1904.

Q. (By Mr. BLAKESLEE.) Can you describe briefly the several forms of means of that sort which have been employed in Wilson under-reamers manufactured by you or on your behalf? A. I can.

Q. Please do so. [81—22]

Mr. LYON.—Objected to as irrelevant, immaterial and incompetent, and not the best evidence.

The COURT.—Objection overruled.

(Testimony of E. C. Wilson.)

Q. (By Mr. BLAKESLEE.) (Continuing.) And if you have before you or can produce anything to illustrate such construction of such means, please do so.

Mr. LYON.—Same objection.

A. The first reamer I had manufactured differed from the one in this suit in that the tee-bar on which the cutters are suspended do not have a slot. It provided a round collar with a hole in it which went down over this stem or tee and formed a set for the spring. When the tee-bar with the spring on it and the cutters attached thereto were admitted into the mouth of the reamer they were all held in place by means of two pins—not threaded pins, but plain tapered pins, called Dowell pins, which were drilled in two holes in the side of the body, and which pins came into contact with the collar in such a way as to hold it all in place. That was the first type of reamer I had made. I later abandoned the plain taper pins, and instead of them I used two screws, threaded pins or plugs which screwed into the sides of the reamer body and set in the holes drilled in this collar, and thereby the springs, cutters and tee were held in place in the reamer body. I changed to another style, abandoning the use of the collar and the screw plugs, using a solid tee, a tee very similar to this, only not so heavy, in the patent, and employed a double key, tapering key, one having a shoulder at the lower edge, and which dropped down into the bore of the reamer body when in place, and the other tapered key was inserted from the opposite side of

(Testimony of E. C. Wilson.)

the reamer body and was held in place by means of a block or screw which was set into the reamer body and which held the keys, or upper half of the key, in place. In addition to those designs, I designed the single-piece key which took the place of the double [82—23] key, and I built a heavier tee, and that is the one I have been manufacturing now for the last three years or more.

Q. (By the COURT.) Is that the one in controversy? A. That is the one in controversy.

The COURT.—I understood the witness to say that he invented this thing.

Mr. LYON.—No; he says he designed it.

The COURT.—Designed it.

Q. (By Mr. BLAKESLEE.) Can you at this time refer to anything before us which discloses the single-piece key to which you have just referred?

A. Yes, sir; I can. The under-reamer which we have here in the room and which we assembled and disassembled is the type I have always used in the single-piece key type of Wilson Under-reamer.

Mr. BLAKESLEE.—Just note that the witness refers to the specimen reamer in the room which has been disassembled and reassembled for the explanation of the invention by counsel before the Court. And we offer the same in evidence as “Defendant’s Exhibit Wilson Single-piece Key Reamer.”

Q. At the present time, are you manufacturing Wilson Under-reamers containing any other sort of means for holding the lower end of the spring surrounding the spring-actuated rod?

(Testimony of E. C. Wilson.)

Mr. LYON.—We object to that as irrelevant and immaterial.

Mr. BLAKESLEE.—We wish to show the practice with regard to this invention, and the reamers, in connection with the development of these reamers and the business, and its importance, and so forth?

A. Yes, sir; we do. We are at present manufacturing a considerable quantity of under-reamers of the type known as the block and screw type, the one which uses the collar and key. We of course are manufacturing the single-piece key type. [83—24]

Q. (By Mr. BLAKESLEE.) How long did you manufacture and sell Wilson under-reamers containing the two-piece key device for holding the lower end of the spring in the hollow body?

A. Possibly a year or year and a half.

Q. (By the COURT.) Has that been patented?

A. No application was made for patent on that double key.

Q. (By Mr. BLAKESLEE.) Can you identify the period of time when this last-mentioned manufacture occurred, approximately?

A. It was sometime during the year of 1907 or 1908, I believe, that the two-piece type reamer was made. Possibly as late as 1909.

Q. Can you produce at the present time any showing of such two-piece key device for holding the lower end of the spring in the Wilson Reamer as manufactured by you as last testified? A. I can.

Mr. BLAKESLEE.—Note on the record witness produces two blue-prints; and the same are offered

(Testimony of E. C. Wilson.)

in evidence, respectively, as Wilson Exhibit Photo "A" of Wilson Reamer Two-piece Key Device, and Wilson Exhibit Photo "B" of Two-piece Key Device.

Mr. LYON.—Objected to as incompetent; no foundation laid.

Mr. BLAKESLEE.—As pointed out, we wish to show the genesis of this invention and that this party Wilson was the logical producer of the invention in issue.

Q. Will you please explain, by reference to any wording or lettering or markings upon these blue-prints, what check the showing of the same is, with particular reference to the two-piece key you have spoken of?

Mr. LYON.—I object to that until the witness answers the question as to whether, of his own knowledge, that is a correct representation of some one of those prints. I don't want the question to be raised hereafter that this witness has not said these truly represent the reamer. I object to the offer, on the [84—25] ground that there is no foundation laid; incompetent. There has been no foundation laid yet. We have been permitting counsel to assume that he will lay the foundation.

Mr. BLAKESLEE.—He has testified that that is made from the negative.

A. They are photographic reproductions of the under-reamer just as we manufactured them.

Mr. LYON.—And when were they taken?

The COURT.—He has stated they were taken

(Testimony of E. C. Wilson.)

when they were manufactured in Bakersfield.

The WITNESS.—Yes, sir. I think in, possibly, 1907.

Mr. BLAKESLEE.—He has already testified to that.

(Previous question read to the witness by the stenographer.)

A. In one of these photographs the two-piece key is shown partly inserted in the body. One of my machinists is holding one piece of the key in one hand and the other piece in the opposite hand. They are marked here in ink on this photograph. One is marked "Lower piece of key," and the notation in ink is shown indicating the shoulder at the lower edge of this key. The other part of the key is marked, "Upper part of key," with an arrow indicating, in each instance.

(Adjourned until two o'clock P. M.) [85—26]

Tuesday, March 23, 1915, 2 o'clock P. M.

E. C. WILSON (Recalled).

Direct Examination (Resumed).

(By Mr. BLAKESLEE.)

Q. Have you received letters patent for inventions upon which you made application for letters patent?

Mr. LYON.—Objected to as leading, irrelevant, immaterial and needlessly incumbering the record.

The COURT.—It seems to me the patents would be the best evidence.

Mr. BLAKESLEE.—We wish to show that he has received letters patent and in that respect he has been an inventor, and so forth.

(Testimony of E. C. Wilson.)

The COURT.—That he has received patents for certain things?

Mr. BLAKESLEE.—Yes, sir; issued to him. It is immaterial what they are, to this issue.

The COURT.—It would be a novel thing if that is pertinent testimony in this case.

Mr. BLAKESLEE.—Simply to establish the surrounding circumstances that he is and has been an inventor and has received letters patent for his inventions. It is to show the mental attitude and the course of events with respect to inventions. This is a controversy in one phase of it as to who invented this device.

The COURT.—I will sustain the objection.

Q. (By Mr. BLAKESLEE.) When was it that an under-reamer was first manufactured, or, rather, commenced to be manufactured by you or on your behalf embodying the single-piece key such as that shown in “Defendant’s Exhibit Wilson Single-piece Key Reamer”?

Mr. LYON.—That question in that form is objected to as [86—27] leading and as incompetent, calling for a conclusion of the witness and not the proper method of proof.

The COURT.—I must confess I do not understand the question.

Mr. BLAKESLEE.—Your Honor, this question, it seems to me, directly concerns the issue. One of our defenses is that this invention had been used and that these reamers had been used—

The COURT.—It may be your question is rele-

(Testimony of E. C. Wilson.)

vant, but I don't understand it.

Mr. BLAKESLEE.—I am not asking with reference to any invention. That might be a conclusion.

Mr. LYON.—It is the device in suit that he is referring to.

Mr. BLAKESLEE.—This reamer over here that we concede we are making and which we contend was made nearly two years prior to the application for the patent in suit.

The COURT.—Answer the question.

A. The first order was made up on February 3, 1911.

Q. (By Mr. BLAKESLEE.) Please state if you know by whom such order was made up.

A. It was dictated by myself.

Q. Where?

A. In the office of the Wilson & Willard Manufacturing Company in this city.

Q. What was next done with that order?

A. The order was typewritten by the stenographer in the usual form and sent to the foreman for execution.

The COURT.—Mr. Blakeslee, I beg your pardon. What became of those blue-prints? Have we disposed of that matter in the testimony this morning?

Mr. BLAKESLEE.—I think so. They were offered simply to show the form and construction of those two-piece keys.

The COURT.—Are they marked as an exhibit?

Mr. BLAKESLEE.—They are offered but not yet marked. [87—28]

(Testimony of E. C. Wilson.)

The COURT.—I do not understand that they had been admitted. What is the purpose of offering those in evidence?

Mr. BLAKESLEE.—To show the genesis of this invention. That is a question material to this issue where the proofs concern the production of a certain thing and the surrounding circumstances are material to show the production. Here is a controversy between two parties—

The COURT.—You object to those being admitted?

Mr. LYON.—We do not object to those and concede them to be true copies.

The COURT.—You can argue that when it comes to the argument. They will be admitted.

Mr. BLAKESLEE.—And the reamer exhibit has also been admitted?

The COURT.—That mechanical construction is admitted. Is that understood, gentlemen?

Mr. Lyon.—The reamer itself, yes.

The COURT.—The whole machine—the key.

Q. (By Mr. BLAKESLEE.) Who was the foreman of the shop at that time? A. Mr. Knapp.

Q. State his full name. A. William G. Knapp.

Q. Is he employed by you at the present time?

A. No, sir.

Q. When did he sever his connection with your institution? A. About two or three months ago.

Q. Can you produce at this time the order which you made out as you say, in 1911—February 3, 1911—for the making of this first Wilson reamer with

(Testimony of E. C. Wilson.)

this single-piece key? If so, please do so.

A. I can. This is the original transcription from my dictation [88—29] showing the order for the first reamer of this single-piece key type.

Mr. LYON.—We object to the answer, especially all that portion following the words “Yes, sir” as not responsive to the question, incompetent, not the best evidence, the paper speaking for itself, and we move to strike it out from the record and exclude it from consideration.

The COURT.—The motion will be granted.

Q. (By Mr. BLAKESLEE.) Please read to us what this order sets forth.

Mr. LYON.—We object to that as not the best evidence.

The COURT.—The order, of course, will show for itself, but I don’t see why he should not read it. Read it into the record.

A. This is made on a regular form of order which we use in our shop. Dated February 3, 1911. Charge to reamer account. Order number 6904. E. C. Wilson, Dictator. Change 8-inch reamer 120 as follows: Anneal same and remill to standard size 8-inch cutter. Bore out a hole for spring to 4-inch diameter. Make special 7/16 by $\frac{3}{4}$ by 18 spring. Put in bottom bolt. Equip with extra heavy slotted tee of new type, same to be made of nickel steel. Those dimensions are put in in pencil—the 4-inch and the dimensions pertaining to the spring.

Q. (By Mr. BLAKESLEE.) At the time you made out this order what was the system in practice

(Testimony of E. C. Wilson.)

at your shop with relation to making out and executing such orders?

A. The order was dictated—or sometimes written in pencil—on a blank form of an order, and turned over to the stenographer who made generally five copies; one copy of the order was a register or index order which was filed away in numerical order with reference to the shop order number. Two of the sheets were used for our sales sheets and cost sheets, and the other two were sent to the shop, one of which went to [89—30] foreman for execution and the other generally to the shipping department.

Q. To what extent and in what manner at that time, namely, the time of making out this order, did you keep in touch with the making out of and execution of such orders in the shop and office?

A. I was in close touch with the business as it was started through the shop and observed it as it was being made in the shop, and oftentimes I gave the shipping instructions to the shipping clerk.

Q. As to the manufacture of these under-reamers and the orders for manufacturing the same, was or was there not anybody in that company or connected with it who was particularly interested, and, if so, who?

Mr. LYON.—Objected to as leading and calling for a conclusion of the witness and not for a statement of facts.

The COURT.—The objection is sustained.

Q. (By Mr. BLAKESLEE.) As to this under-reamer business at the time you have stated, in what

(Testimony of E. C. Wilson.)

name was the account pertinent to the manufacture and sale of under-reamers kept?

Mr. LYON.—Objected to as assuming a fact not appearing from the record, and as irrelevant and immaterial.

The COURT.—The objection is overruled.

A. The under-reamers were manufactured by the Wilson & Willard Manufacturing Company and charged to a special account known as the "Reamer Account" on the books. That reamer account was one for which I was responsible, as it was the one in which I was charged for the manufacture of the under-reamers, and that account was credited when the under-reamers were sold.

Q. (By Mr. BLAKESLEE.) Where did the profits or proceeds from such reamers go?

A. To myself. [90—31]

Q. Please state, if you know, what these other slips are, connected with this Order No. 6904, in your hands.

Mr. LYON.—Objected to as incompetent, no foundation laid, not shown that the witness has any personal knowledge of any of those slips.

The COURT.—The objection is overruled.

A. One of these orders is—

Q. (By Mr. BLAKESLEE.) Please take them up seriatim, the one next to that, and so get them in sequence.

A. Order No. 7056, dated February 18, was made out from the reamer account and covers "Forge and machine one special 8-inch slotted tee of nickel steel;

(Testimony of E. C. Wilson.)

coil 1 special spring for same," This order was dictated by Mr. Knapp. It has his initial "K" indicating that the order was made up by him. This was a subdivision of the original order.

Mr. LYON.—May I ask a question to save time? Have you any personal knowledge of Mr. Knapp making up that particular order?

A. I saw the order as it was in the shop, yes; I know the order was made up.

Q. Did you see him make the order up?

A. I did not see him dictate it.

Mr. LYON.—I move to strike that from the record as hearsay and ask the Court to instruct the witness to confine his testimony to that which he knows to be a fact.

The COURT.—You ought to prove those facts by the man who made up the matter instead of secondary evidence.

Mr. BLAKESLEE.—We shall prove that by the other witness.

A. The other sheet shows a drawing of this special 8-inch slotted tee, which drawing I made up myself in pencil, and was the original sketch or drawing to govern the foreman in making the 8-inch tee for this reamer 120.

Q. What, if you know, was done with this last-mentioned slip [91—32] showing this sketch you say you made after you completed the sketch?

A. It was part of the instructions I gave to Mr. Knapp to guide him in making up this reamer.

Q. What was done with this particular paper with

(Testimony of E. C. Wilson.)

the sketch at that time?

A. It was turned over to Mr. Knapp.

Q. Is that the same Mr. Knapp you have spoken of before as foreman of the shop at that time?

A. Yes, sir.

Q. And in giving Mr. Knapp these instructions including the delivery to him of these slips you have referred to as having been so delivered to him, were or were not any further instructions of any kind given to Mr. Knapp with respect to the making over of this reamer 120? A. There were.

Q. What was the nature of the same?

A. I gave him instructions in regard to the type of spring to use and also in regard to the one-piece key which was to be used in this reamer.

Q. How did you give him instructions with respect to this one-piece key?

A. It is my recollection that the sketch was made up on a piece of brown paper in the same manner that this tee is made up.

Q. Were any further instructions along this line given to Mr. Knapp to your knowledge?

A. Yes, sir. I remember on two or three different occasions explaining to Mr. Knapp how to make the keys.

Q. And about what time, as near as you can place it?

A. That was probably about February 3, or very soon thereafter, of 1911.

Q. To your knowledge, what next occurred at your shop in [92—33] connection with this order 6904

(Testimony of E. C. Wilson.)

concerning the making up of reamer 120?

A. The foreman put in execution the order for construction that I gave him in regard to the making of the reamer over.

Mr. LYON.—We move to strike the answer from the record on the ground that it is a conclusion and not a statement of fact.

Mr. BLAKESLEE.—We agree that it be stricken out.

A. The reamer was changed over as per instructions.

Q. Please recite what was done in those particulars to your knowledge.

A. An under-reamer we had in stock of the old-style, two-piece key type, the number of which reamer was 120, was changed over to the single-piece key type as per these instructions which I have just read.

Q. And what occurred with respect to this reamer in so changing it over?

A. The reamer was sold. It was sent out and was used.

Q. My question was directed to what was done pursuant to the order you say you gave in connection with this reamer, and by that I mean what physical acts were performed or effects produced.

A. I did not understand your question. In order to admit of a larger size tee and spring, we had to anneal the tempered end of the body or mouth of the body in order to bore it out to a larger size. We made a larger tee, made a larger spring, and made a 1-piece key. We had to drill out the lower end of

(Testimony of E. C. Wilson.)

that under-reamer body and fit a safety bolt to it which the reamer did not have in the first place, I believe. In making the key we had considerable difficulty in removing it with a lever that I had devised by changing over a lever which I had in stock for use in assembling the block-and-screw type of under-reamer. We had had considerable trouble, as I say, in removing this key, and it was one day discovered by [93—34] a machinist that we have by the name of Houriet that by merely driving a wedge or the pointed end of a file underneath one end of this key he could pry it up to such a position that the operator could drive it out from the opposite side. The idea I had in mind first in removing this key, was to have a notch at the lower edge of one end of the key, and by a certain shaped lever it could be pressed beneath the key, and pry it upwardly and pry the key outwardly. But that did not seem to be so successful, and the means discovered by Mr. Houriet was the successful means and the one we have always used since. It was a little key that we drove in at one end and pried it up.

Q. (By the COURT.) At one side?

A. Yes; and then it could be driven out from the other side. I had always known in thinking this key over that there would be probably considerable trouble to remove that key. I was afraid that it would be so serious that it would prevent its being adopted, and a trial of the lever means proved my suspicions to be somewhat correct. But Mr. Houriet's method overcame the trouble.

(Testimony of E. C. Wilson.)

Q. (By Mr. BLAKESLEE.) Can you mention the names of any other persons who had anything to do with the making over of reamer 120 and its construction so that it would embody the single-piece key?

A. You mean the men who actually worked on the reamer?

Q. Yes.

Mr. LYON.—Of your own knowledge.

A. The key was forged by Mr. Rydgren and his helper Mr. Bird. Some of the fitting work was done by a man named Wills. I believe Mr. Houriet himself also did some work on that key.

Q. (By Mr. BLAKESLEE.) Are any of these men in your employ at the present time? And, if so, which? A. Mr. Houriet is still in our employ.

Q. After the last step was taken on this reamer 120, in making it over to include the 1-piece key, what became of such [93a—35] made-over reamer?

A. It was for some weeks in our shop, and a sale was not made of it till, I believe, in June, 1911.

Q. To whom was it then sold?

A. It was sold to Norbeck & Nicholson Company, South Dakota.

Q. And was it delivered to them?

A. It was shipped to them; yes, sir.

Q. When? A. It was in June, 1911.

Q. Can you produce any record or document which in any way will identify the date of such shipment to this vendee?

A. I believe the copy of the original shop order is

(Testimony of E. C. Wilson.)

among the exhibits here.

Mr. LYON.—Have you the date in mind when that was shipped? I do not controvert it. Mr. Wilson don't know anything about it, either, according to his own recollection. I am willing to admit that it was shipped at whatever date you say it was shipped. We have no question but what it was shipped to these people.

A. This is the order on which that sale to the Norbeck & Nicholson Company was made. It was shipped on June 17, 1911.

Mr. BLAKESLEE.—I will ask counsel if he is prepared to stipulate that a reamer of this construction and embodying all of the claims of the patent in suit was completed at the shop of the Wilson & Willard Manufacturing Company, the defendant, and thereafter put into successful operation not later than the 1st of July, 1911.

Mr. LYON.—I will not make any stipulation in view of the refusal of counsel for Wilson to make any in this case.

Mr. BLAKESLEE.—You said you wished to save time.

Mr. LYON.—This witness doesn't know those facts of his own knowledge.

Mr. BLAKESLEE.—It was so stipulated before, I believe, in the [94—36] other case.

Q. Please state, to the best of your knowledge, when the first work on this reamer 120 was completed so that it was in condition to be sold.

Mr. LYON.—I object to the question as incompe-

(Testimony of E. C. Wilson.)

tent, the witness not having qualified to answer the question. I am not making the objection captiously, because it is the very crux of the case, and I want to know whether the witness knows of his own knowledge what he is talking about.

Mr. BLAKESLEE.—That is all we ask for. He testified to the production of it and the shipment of it.

The COURT.—I will overrule the objection.

A. The order was completed in April, 1911, to the best of my knowledge, although the exact dates are on these sheets here.

Q. (By Mr. BLAKESLEE.) Can you produce any further paper or document which to your knowledge pertains to the work upon this reamer 120 about which you have testified?

A. Yes, sir; there was a drawing made from this little sketch which is a regular working drawing for this slotted tee.

Q. When did you first see this drawing?

A. At the time the work was being done in the shop.

Q. Can you specify as to the date?

A. It was shortly after the original order was made up as part of the regular course of work in completing the order. This drawing also shows an outline of the key—

Mr. LYON.—We object to the statement of the witness what the drawing shows. The drawing speaks for itself.

Q. (By the COURT.) Did you make that draw-

(Testimony of E. C. Wilson.)

ing? A. I did not.

The COURT.—I don't think the witness is competent to explain it, unless he made it.

Mr. BLAKESLEE.—My question was when he first saw it, and [95—37] I agree to the objection. I am simply developing the knowledge of the witness of this drawing.

Q. Do you know who made this drawing, and, if so, who?

The COURT.—What materiality is that, whether he knows who made it?

Mr. BLAKESLEE.—He will be corroborated as to that. We wish to establish this by the testimony of corroborating witnesses as to his connection with this work, to fix the date which, as counsel says, is important, when this reamer was made over and completed.

Mr. LYON.—I said when it was completed, and not when they were doing the work.

The COURT.—Overruled.

A. The drawing of the other tee and spring was made by our draughtsman at that time, whose name was Bandell. The drawing of the key was made by Mr. Knapp.

Q. (By Mr. BLAKESLEE.) You have referred to a drawing of a key. Which is that on that sketch?

A. A drawing at the lower left-hand corner of this.

Q. And what is that key so portrayed there, to your knowledge?

A. It is a drawing of the single-piece key used in completion of this 8-inch reamer 120.

(Testimony of E. C. Wilson.)

The COURT.—As I understand, this is a drawing to the one that was shipped.

Mr. BLAKESLEE.—Yes, sir. The witness has testified that that sketch on brown paper was made to conform with the sketch before your Honor, the yellow paper which was made by the witness.

Mr. BLAKESLEE.—We offer in evidence the group of slips, and shop orders, sketches, etc., just discussed by the witness, as “Defendant’s Exhibit February, 1911, Wilson & Willard Manufacturing Company Shop Record Slips,” and ask that the same be so received and marked.

Mr. LYON.—Objected to as incompetent, no foundation laid, not [96—38] identified, and that this witness has not personal knowledge of all those slips, and, of course, this objection does not go to those that he has any knowledge of.

The COURT.—Isn’t that right?

Mr. BLAKESLEE.—That is perfectly satisfactory. They are grouped together because they pertain to the certain matter. The objection, of course, we agree to, as attaches to anything the witness has not identified.

The COURT.—You can hold the exhibit in reserve until it is fully identified.

Mr. BLAKESLEE.—And reoffer it at that time.

Q. Where have these several slips that I have just referred to and you have discussed, been since you first saw them?

Mr. LYON.—Objected to as irrelevant and immaterial.

(Testimony of E. C. Wilson.)

Mr. BLAKESLEE.—I want to show that they are part of the records of somebody.

A. They have been in the regular files of shop orders and time-cards in the shop.

Q. (By the COURT.) Who made these red writings on here, or dates?

Mr. LYON.—I don't like to object to the Court's question, but I don't think this man knows.

A. That is Mr. Knapp's writing—the writing in red pencil.

Q. (By Mr. LYON.) You didn't see it put on there and know anything about it at the time, did you?

A. I don't know whether I saw it put on there or not.

Mr. LYON.—I move to strike the answer from the record and exclude it from consideration.

Mr. BLAKESLEE.—He says he knows the writing.

The COURT.—The objection is overruled.

Q. (By Mr. BLAKESLEE.) Please state if you know from whom the men who worked on this reamer 120 in making it over, as you have [97—39] testified, received their pay.

A. From the Wilson & Willard Manufacturing Company, of which I am president.

Q. And what was your office in connection with that company at that time?

A. President at that time.

Q. In connection with this single-piece key device of the Wilson under-reamer, what did you first have

(Testimony of E. C. Wilson.)

to do with the same in any respect?

A. You mean that particular reamer 120?

Q. Yes; that reamer, or with the single-piece key device such as is incorporated in that reamer.

A. The idea of the single-piece key had occurred to me on many occasions before this order was made up, namely, before February 3, 1911. As early as 1906 or seven I had devised this 2-piece key type, and in designing that type of reamer different ideas of single-piece keys had occurred to me, but I concluded at that time that the double-piece key was the better type. I think it was in January—on January 26, 1911—we received an order from the Pacific Iron Works of McKittrick, for an old-style slotted tee for 12 $\frac{1}{2}$ -inch Wilson under-reamer to be shipped up by express. The order was filed on that day and I was surprised to find that there was a reamer of that type still in use. We had changed over a great many of those reamers to the block-and-screw type. I had abandoned the use of the slotted-tee type before on account of the weakness of the tee. It broke through the slot. I had depended on a draughtsman whom I had employed when that reamer was first constructed to so proportion the tee and lay it out to working size of the drawings as to give that tee all the strength possible. The breakage of these tees caused me to abandon the use of them and to go back to what we termed the “block-and-screw” type. So that this order received on January 26, [98—40] 1911, again brought to my mind that possibly there was merit in that tee, and for the first time it oc-

(Testimony of E. C. Wilson.)

curred to me that it was barely possible that the draughtsman had made an error in his dimensions and had not made the tee as strong as it could be made. I went over to a draughting board and myself laid out one of the tees of the slotted type, increasing its size and making it the size that I discovered when I commenced to work on it myself that it could be made. I was surprised to find that it was fully twice as strong as those we had made when that type of reamer was being made by our plant and by the Bakersfield Iron Works. I then made up my mind that I would go back to the slotted-tee type, using the larger proportions of tees. With that idea thoroughly settled, I checked up by comparing my figures with those of my brother's. We went over them very carefully at that time, January 26, 1911, and I then made up my mind that it was possible to make a single-piece key which might overcome a few of the minor troubles we had had with the double-key type. The double-key type was a success with the exception of the tee and possible occasional trouble had by the plug which held half of the double-piece key in place, when it would rust and stick and sometimes cause trouble to remove. But that was really a minor trouble with that key. The ideas that I had had and that had occurred to me back in 1906 or seven then occurred to me, and I pondered over that idea in keys three or four days. I made sketches of them, and thought over them and studied over them at home, and I could not determine in my own mind which was the better form of those keys to try

(Testimony of E. C. Wilson.)

out first in this new type of reamer. And finally I concluded one day to call some of the boys together and get their opinion of which would be the better type of key to adopt in this 8-inch reamer that we were changing over. And some time about February 1, or 2 or 3—somewhere right in there—one afternoon I called some of our boys together and [99—41] explained to them that I was going back to the slotted-tee type; that I was satisfied it was the best, as I had discovered that I could increase the strength of the tee so that that trouble would be settled and overcome; but that I was not sure which style of the key I would use. And I then produced some little sketches which I then had in my pocket and which I had been thinking over and said, “Here are the different ideas I have,” one of which would have to be held in with a plug and another one probably with two plugs, and one dispensing with the use of the plug at all; but that the key, while I could see that it was stronger and probably very convenient to put in place, I was uncertain as to the best method of removing it from the reamer when it was in place. The tension of that spring is very great on large reamers and it is a pretty difficult matter to get the key out. And in our conversation I said, “Here is the best key. I can see that. It will stay in the reamer without the use of any plug at all, but we will have trouble to remove it.” And at that juncture Mr. Bole, who was in that conference—there was Mr. Knapp, I believe, Mr. Willcox, possibly my brother W. W., and Mr. A. G. Willard and Mr. Bole. We

(Testimony of E. C. Wilson.)

were all in conference over this key proposition—Mr. Bole suggested to pry it out. I said, “Very well. We will admit that it can be pried out, but won’t it give so much trouble in doing so that it will probably condemn it and the drillers won’t use it?” He says, “No; I can devise a tool which will pry it out.” I said, “I can devise a tool that will pry it out, but I think it will give us a good deal of trouble.” After further discussion the boys agreed with me that that was the better style of key, and it was well worth trying, and with that point settled we proceeded to make up a single-piece key as I desired. That was the genesis of that key.

Q. In what manner or by what means did you put before these several persons at the date mentioned in February, 1911, this single-piece key and the various forms of the same that you have told us about? [100—42]

A. I had some little sketches on—I don’t know whether it was these shop orders, but, at any rate, it was some papers that I had in the shop and which I had made while I was thinking it up, and which I had been carrying around for several days. And that is the way I submitted these ideas to these men for their consideration.

Q. Do you know where those sketches are now?

A. No, sir; I do not.

Q. When did you last see them?

A. I don’t remember. I don’t think I preserved them at all. The key was made up, probably, from

(Testimony of E. C. Wilson.)

the one I showed the boys at the time, one of these original sketches.

Q. Have you at any time since then attempted to reproduce the sketches which you have testified you showed at that time to these several parties?

Mr. LYON.—We object to that as leading and irrelevant and immaterial. Such reproductions would be no better than sketches that he could make at the present time.

The COURT.—I agree with you. I don't think that is material evidence. (Discussion). I will overrule the objection.

Mr. LYON.—This sketch is the same as if he made some now for use in the Patent Office.

The COURT.—I don't see any difference between a sketch made now and one made one year ago.

A. If it will satisfy them any better I can make those sketches now without referring to the documents which I made a year ago.

Q. (By Mr. BLAKESLEE.) It will save considerable time as well.

The COURT.—The objection is overruled.

A. I have.

Q. (By Mr. BLAKESLEE.) Can you at this time produce any such attempted reproductions?
[101—43]

A. That goes back to these? This is it right here.

Q. Please state when you made this reproduction.

A. While the testimony in the interference case was being taken.

Q. What interference do you refer to?

(Testimony of E. C. Wilson.)

A. The case of Wilson & Willard vs. Robert E. Bole, I believe, and Edward Double or the Union Tool Company. I don't know how it is entitled.

Q. Where was that interference pending?

Mr. LYON.—Objected to as irrelevant and immaterial.

The COURT.—The question is, what this is; what it was used for and when.

Q. (By Mr. BLAKESLEE.) Will you please tell us what you intended to portray by these reproduction sketches at the time you made the same and what the purpose was for making the same?

A. It was to illustrate the different styles of keys, or some of them, at least, which I had submitted to the gentlemen mentioned at that conference or conversation about February 1, 2 or 3, of 1911.

Q. Referring to the several showings of this sketch, will you please tell the Court what they represent,

A. This Fig. 1 represented a 1-piece key which required two plugs to hold it in place. One of the plugs remained in the reamer body permanently, while the other had to be removed in order to remove the key. This key was tapered at one end only. The other, Fig. 2, was designed very much like Fig. 1, with the exception that it had downwardly projecting shoulder at the lower edge of the key, just as appeared on one-half of the double-piece key which I had used several years before. By driving that key underneath the spring and driving it into place, the downward projection at the lower edge would

(Testimony of E. C. Wilson.)

drop into the bore of the reamer body and would prevent the key from returning that way. To prevent the key from going on through, a plug was used which [102—44] screwed into the reamer body and partly covered up this slot in which the key fitted. This kept the key from moving either way. To remove that key the plug in the reamer body was removed and the key could then be driven completely through the reamer and removed. Another key shown by Fig. 3 was the key very much like the one in this exhibit of under-reamer here in the room. I believe that key was tapered at one end only. I think that was the idea I had when I first presented these drawings. It had a downwardly projecting shoulder which dropped into the reamer bore and which was held in place by the tension of the spring.

Q. I notice that this reproduction sketch has various wordings on it. What relation is there between such wording and the language you have used in describing what this sketch shows or what these sketches show?

The COURT.—I don't think that wording on there is material. He has testified what the drawing is for.

A. The wording as noted on this sketch was made by myself at the time this interference testimony was taken, and it simply explains the different pieces of the reamer body and key and the different shoulders, angles and plugs as I have referred to them here at present.

Q. (By Mr. BLAKESLEE.) What relation is

(Testimony of E. C. Wilson.)

there between any of the keys shown in this sketch and the key which was put in the reamer No. 120 made over on your order of February 3, 1911?

Mr. LYON.—That is objected to as leading and suggestive, incompetent, calling for the mere conclusion of the witness and not the best evidence. The exhibit speaks for itself.

The COURT.—It seems to me that asking a witness what the relation is is calling for the opinion of the witness, or conclusion, as it is called. Describing two things would certainly serve the purpose. The Court can determine what the relation is.

Mr. BLAKESLEE.—The question is withdrawn.
[103—45]

Q. Please compare the keys shown in this sketch or any of them with the key which entered into the construction of reamer 120 made over upon your order of February 3, 1911.

Mr. LYON.—Objected to as irrelevant, immaterial, incompetent, and needlessly encumbering the record. The other key has a drawing of it already in the record.

Mr. BLAKESLEE.—We want to couple up with this first manufacture the mental procedure of this witness in connection with the invention.

The COURT.—It seems to me all these drawings are very simple. I do not see that it requires any expert testimony in describing the drawings. (Discussion.) I am not going to permit the witness to argue his case. I will let him proceed. If that is the purpose of the question, I will not permit it. I

(Testimony of E. C. Wilson.)

will let him answer it subject to a motion to strike out.

A. The key Fig. 3 as shown in this sketch is, with the exception of the upper right-hand corner, the type of key which was made and used in reamer 120, and with the exception, too, of two little notches, one at each of the lower edges at the extreme ends.

Mr. LYON.—We renew the objection and move to strike out the answer from the record on the ground stated.

The COURT.—I will overrule the motion. Proceed, Mr. Blakeslee.

Mr. BLAKESLEE.—Let the record show that the group of shop slips, sketches, etc., to which the witness has previously referred, is at present marked for identification “Wilson’s Exhibit February, 1911, Wilson & Willard Manufacturing Company Shop Record Slips,” and, likewise, that the sketch matter and wording, etc., upon brown paper to which the witness subsequently referred is marked for identification “Wilson Exhibit Wilson Reamer Key and Tee Sketch of 1911.”

The COURT.—Hadrn’t you better mark them for identification with some number? I think they had better be marked for identification only. They are not received in evidence. [104—46]

Q. (By Mr. BLAKESLEE.) Are you at the present time able to produce any document or thing which tends to fix the time at which you did this work in your shop, as you have testified, in the latter part of January, 1911, preparatory to giving the

(Testimony of E. C. Wilson.)

order for making over reamer 120? I am referring particularly to the work you say you did at the draughting board.

Mr. LYON.—I object to that question as it calls for a conclusion as to whether it tends to fix.

The COURT.—I think that objection is well taken. If he has got any other thing, let him produce it.

Q. (By Mr. BLAKESLEE.) Can you at this time in any way identify and fix the date at which you say you did work at the draughting board, etc., in the latter part of January, 1911, prior to giving the order for making over reamer 120?

A. Yes, sir; I can.

Q. Please do so.

A. On the day I received the order from Mr. Williams, January 26, 1911, I wrote a letter—

Mr. LYON.—I object on the ground that the answer is not responsive, not the best evidence and incompetent. He is going ahead to state that he wrote a letter at a given time, etc., and the letter is the best evidence.

The COURT.—Surely the letter is the best evidence of its contents.

Mr. BLAKESLEE.—Can't he state that he wrote the letter before he produces it?

The COURT.—Yes, but it seems to me like that is proceeding backwards.

Mr. BLAKESLEE.—I think the witness can produce the letter.

A. Yes, sir; here is the letter.

(Testimony of E. C. Wilson.)

Q. What is it that you have produced?

A. I have produced a tissue copy of a letter which I addressed to H. S. Williams on January 26, 1911.

[105—47]

Q. What does this tissue letter copy form part of?

A. Our regular letter files.

Q. What have you before you with this tissue copy?

A. One of the regular letter-books, which form a part of our letters or copies of letters, which we wrote out.

Q. How was that copy produced?

Mr. LYON.—Objected to as incompetent, no foundation laid, the witness not having qualified to answer the question. I don't think he has any personal knowledge of it.

A. This letter is signed and dictated by myself.

Q. (By Mr. LYON.) Did you see this copy made, Mr. Wilson? Have you any recollection of it?

A. After a letter is signed—

Q. Did you see this copy made?

A. I don't know that I saw the copy made; I saw the copy of the letter.

The COURT.—Do you want to get the contents of the letter in evidence?

Mr. BLAKESLEE.—We will ask the witness to read the letter and get it into the record.

The COURT.—Where is the original?

A. I presume Mr. Williams at McKittrick has it.

Q. Have you endeavored to get it?

A. I never did.

(Testimony of E. C. Wilson.)

Mr. BLAKESLEE.—The contents are not material, but the simple fact that he did write such a letter at this time.

The COURT.—I understand that you do not want to get the contents of the letter in, but the fact that he wrote the letter.

Mr. BLAKESLEE.—That is it.

The COURT.—You have got that. He stated that he wrote the letter.

Q. (By Mr. BLAKESLEE.) Who is the Mr. Williams that you refer to in this letter? [106—48]

A. He was manager of the Pacific Iron Works at McKittrick, California.

Q. Did you have any business dealings with him at that time, and, if so, what?

A. Yes, sir; he was the gentleman who placed the order for the 12½-inch old-style slotted-tee Wilson under-reamer, which order we received on January 26, 1911. [107—49]

Q. Did you have any further correspondence with Williams about that time, and, if so, what?

A. I received a letter from him in response to this letter of January 26th.

Q. Can you produce that letter?

A. I think it is here among the exhibits. Yes; this is the letter.

Q. (Witness produces letter.) When did you receive that letter? A. On January 30th, 1911.

Q. Are you acquainted with the signature of Mr. Williams? A. I am.

Q. Whose signature is that attached to this letter?

(Testimony of E. C. Wilson.)

A. This is Mr. Williams' signature.

Q. With relation to the date of the receipt of this last letter, when was it that you took the first steps in and about this reamer matter, and enlarging of the tee, as to which you said you did certain work on the drafting board in your own shop?

Mr. LYON.—That is leading and suggestive, your Honor.

Mr. BLAKESLEE.—The relation between them on this subject, if your Honor please.

A. This letter from Mr. Williams convinced me of the wisdom of changing back to the slotted tee type of Wilson under-reamer, using the heavier slotted tee, and from that time I set about seriously to make the change in the reamer.

Q. And, with respect to the date of the receipt of this letter, when was it you did the first of this work about the drafting board in connection with this change in the reamer?

A. The preliminary work I did on January 26th.

Q. The year? A. 1911.

Mr. BLAKESLEE.—We offer in evidence the Williams letter just referred to by the witness as "Defendant's Exhibit Pacific [108—50] Iron Works letter of January 28th, 1911," and ask that the same be so marked and received.

Q. You have referred to a number of parties with whom you discussed the several sketches pertinent to the single-piece key form in the early part of February, 1911. Will you please identify those present a little more particularly.

(Testimony of E. C. Wilson.)

A. Mr. A. G. Willard was present. He was interested with me in the Wilson & Willard Manufacturing Company at that time. Mr. Knapp, the foreman, Mr. Wilcox, C. E. Wilcox, the salesman, Mr. Robert E. Bole, for whom the Wilson & Willard Manufacturing Company was making pumps, and my brother, W. W. Wilson. I believe they were all present at that conference.

Q. Can you produce any record pertinent to the order you say you received January 26th, 1911, from Mr. Williams, of the Pacific Iron Works, for the slotted tee?

A. I think a copy of the shipping order is here.

Q. What, if anything, do you know about these shipping order slips?

A. This order was dictated by myself, on receipt of the order from the Pacific Iron Works at McKittrick, on January 26th, 1911, and the order was filled on these instructions and shipped. The date of the shipment or delivery is January 26th, 1911, showing that the twelve and one-half inch slotted tee was shipped by express on the day the order was received. This shipment I see is O. K.'d by Grigsby, who was our shipping clerk at that time.

Q. Where have these shipping order slips been since the time you dictated them?

A. They have been filed away among our regular records, except such portion of the time as they were in evidence in this interference case.

Mr. BLAKESLEE.—We offer in evidence the two shipping order slips just referred to by the witness,

(Testimony of E. C. Wilson.)

attached together, as [109—51] “Defendant’s Exhibit Pacific Iron Works, January 26, 1911, shop order slips,” and ask that they be so received and marked.

(Marked Defendant’s Exhibit 2).

Q. At about the time that reamer 120 was made over to include the single-piece key, was any other under-reamer with such single-piece key manufactured by the Wilson & Willard Manufacturing Company? A. Yes, sir.

Q. What do you know about such other reamer?

A. A ten-inch Wilson Under-reamer of the single-piece key type was made and shipped to the Kern Trading & Oil Company at Kerto.

Q. Do you know when that reamer was shipped?

A. It was in May, I believe, of 1911.

Q. How did this reamer compare with reamer 120 as made over?

A. It was in, practically, the same design, except, of course, being a larger reamer, being for a larger sized casing; and, if I recollect right, the slot in which the key was inserted was placed **through from the** opposite angle to the one used in making the reamer Number 120, the eight-inch.

Q. It didn’t produce any change in the organization of the reamer?

A. Not at all. It was just a shop change.

Q. Can you produce any record or papers of your company which related to the shipment of that reamer? A. Yes, sir (produces).

Q. Please describe what you have produced.

(Testimony of E. C. Wilson.)

A. This is the shipping receipt on which a ten-inch Wilson Under-reamer, numbered 496, and one small lever attached, was shipped to the Kern Trading & Oil Company at Kerto, California, by Southern Pacific freight.

Q. (By Mr. LYON.) On what date?

A. On May 25th, 1911. [110—52]

Mr. BLAKESLEE.—We offer in evidence the receipt just produced by the witness, as “Defendant’s Exhibit ‘B,’ Specimens of Grigsby’s Handwriting, or Shipping Receipt of May 25, 1911.”

Q. When did you first have any knowledge whatever of a single-piece key for under-reamers such as that you say was incorporated in reamer 120 when made over on shop border 6904 of February 3, 1911?

Mr. LYON.—That is objected to as calling for the conclusion of the witness.

Mr. BLAKESLEE.—I ask him as to his knowledge of such key.

The COURT.—I think the question is proper.

A. My knowledge of that style or design of key probably dates back to the time I was working on the two-piece key in 1906 or possibly '07.

Q. (By Mr. BLAKESLEE.) From what source was such knowledge received?

A. My own conception.

Q. Subsequently to that early time, and prior to the time you made preparations for making over reamer 120 to embody such single-piece key, did you from any other source, or did you not, receive any

(Testimony of E. C. Wilson.)

information or knowledge with respect to such single-piece key?

Mr. LYON.—That is objected to as leading, and as incompetent, calling for the conclusion of the witness.

The COURT.—I will overrule the objection.

A. No, sir; I did not.

Q. (By Mr. BLAKESLEE.) Prior to the time last mentioned had you ever seen such a one-piece reamer key?

The COURT.—What time is this you are referring to now?

Mr. BLAKESLEE.—In the early part of 1911, when he made preparation to make over reamer 120.

Mr. LYON.—The question is indefinite and uncertain as to time. [111—53]

The COURT.—Answer the question.

A. No, sir.

Q. (By Mr. BLAKESLEE.) Had you, prior to February 3, 1911? A. No, sir.

Q. Prior to February 3, 1911, had you ever seen a cut or drawing or any descriptive matter disclosing such one-piece key?

Mr. LYON.—Object to that as leading.

The COURT.—Overruled.

A. Nothing but those which I made myself.

Q. (By Mr. BLAKESLEE.) Prior to February 3, 1911, was such a single-piece key ever described to you, by word of mouth or otherwise, by any other person?

(Testimony of E. C. Wilson.)

Mr. LYON.—Object to that as leading.

The COURT.—Overrule the objection.

A. No, sir.

Q. (By Mr. BLAKESLEE.) Can you state, approximately, how many under-reamers you have constructed, or the Wilson & Willard Manufacturing Company has constructed for you, containing such a single-piece key as we are discussing?

A. Probably six or eight hundred.

Q. How many such under-reamers of like kind or description were made by you or for you prior to February 19th, 1913, the date of the application for the Bole Patent in suit?

Mr. LYON.—We object to the question, inasmuch as it calls for a mere guess or approximation. If the witness is able to state positively, I have no objection.

The COURT.—I will overrule the objection.

A. Probably two hundred.

Q. (By Mr. BLAKESLEE.) Have you ever seen such a Wilson Under-reamer in use or operation?

A. Yes, sir.

Q. When did you first see such a Wilson Under-reamer in use or operation? [112—54]

A. In the year 1911.

Q. How frequently during that year, and prior to February, 1913, did you witness such operation?

A. Oh, on several occasions. I didn't make many trips into the oil fields at that time.

Q. What were your principal duties during that period of time?

(Testimony of E. C. Wilson.)

A. I remained in the shop as manager. I had men who went to the field.

Q. Can you produce any record of the shop of your company, the defendant, which is used or has been used or exemplifies what has been used in the shop in connection with the turning out of Wilson Under-reamers with this one-piece key?

A. I can. (Witness produces two blue-prints.)

Q. Please tell us what these blue-prints portray.

Mr. Lyon.—I object to that question, on the ground that the prints must speak for themselves.

The COURT.—I think that is right.

Mr. BLAKESLEE.—All I wish is a general statement of what these are—not a detailed discussion of them.

The COURT.—Do you object to that?

Mr. LYON.—No, if he states generally they are blue-prints of working drawings, or something of that kind. But that is not what his question calls for.

The COURT.—No; I agree with you. State, generally, what these things are.

The WITNESS.—These are copies of regular blue-prints which we use in our shops and which show the dimensions and proportions in making our under-reamers.

Q. (By Mr. BLAKESLEE.) How early were these blue-prints, or blue-prints from the same tracings, used in your shop?

Mr. LYON.—We object to that as incompetent, no foundation laid.

(Testimony of E. C. Wilson.)

The COURT.—Overruled. [113—55]

A. These drawings bear the date they were completed by the draughtsman, the date being May 6th, 1911; and they have been part of our regular records ever since.

Q. (By Mr. BLAKESLEE.) Is the single-piece key we have discussed shown in these blue-prints? And, if so, where and how marked?

A. They are. They are lettered here in this blue-print as “Drive key—steel.”

Mr. BLAKESLEE.—We offer in evidence the two blue-prints, connected together, just discussed by the witness, as “Defendant’s Exhibit Wilson Reamer Shop Blue-prints of Tracings of May 6, 1911, and June 2, 1911,” and ask that the same be received and so marked.

Mr. LYON.—The only objection we make to them is the objection as to the date. It is incompetent, to prove the date.

The COURT.—I think that objection is well taken. They bear that date, as I understand, but there is no proof that they were really in existence on that date.

Mr. LYON.—I don’t see the materiality of it from that standpoint, anyway.

Mr. BLAKESLEE.—The materiality of it we will show.

Q. What can you state, Mr. Wilson, as to the date upon which the tracings from which these blue-prints were made were themselves executed?

Mr. LYON.—Object to that, on the ground that there is no foundation laid. He has not stated that

(Testimony of E. C. Wilson.)

he knows anything about their dates.

A. It is one of the regular customs of the shop practice to take the date the drawing is completed and affix the date to the tracing so that you always know in the shop, by referring to the blue-print of such and such a date, what design was made on that date.

Q. (By Mr. BLAKESLEE.) How early did you see such tracings or [114—56] blue-prints of the same, giving the date as nearly as you can?

A. I saw those drawings while they were under construction—that is, the tracing from which these blue-prints were made.

Q. And when was that?

A. That was probably shortly before this date, the completion as shown on the blue-print.

Q. After the shipment of these first two reamers with the single-piece key, namely, those to the Kern Trading & Oil Company, and Norbeck & Nicholson Company, how soon did you institute the manufacture of such reamers generally, or extensively?

A. I think I determined to adopt that style of reamer probably in April or May of 1911. The drawings were made up, and we made that style of an under-reamer thereafter, unless reamers of other types were specified when ordered.

Mr. BLAKESLEE.—In view of the testimony of the witness subsequent to the question of date of execution of the tracings of the blue-prints last referred to, we wish to again offer the same in evidence, and ask that they be marked as before requested.

(Testimony of E. C. Wilson.)

Mr. LYON.—I object to them as incompetent, no foundation laid, and ask leave to cross-examine the witness in regard to one or two facts in relation thereto, in that connection.

Mr. BLAKESLEE.—Well, we don't like to be interrupted, if your Honor please.

The COURT.—I think counsel has got the right to examine the witness about this exhibit before it is received in evidence.

Mr. BLAKESLEE.—We will hold it then, and offer it again later, if necessary. We have no objection, however, to questions in their proper order. Go ahead.

Q. (By Mr. LYON.) These prints have been made from a tracing, haven't they?

A. They have.

Q. They are not the original drawings? [115—57]

A. They are copies of the original drawings, as nearly as reproductions can be made.

Q. And there have been a number of changes made in the original drawing since its first production in 1911, haven't there?

A. Possibly, in that way of proportions or dimensions.

Q. There have been changes made, haven't there?

A. Possibly in the way of proportions or dimensions, yes.

Mr. LYON.—We stand on the objection.

Q. (By Mr. BLAKESLEE.) Why is it that the original tracings are not produced at this time?

(Testimony of E. C. Wilson.)

Mr. LYON.—You can have the same force and effect of these prints as though the tracings themselves were here. My objection is that these are not either of them what they had in May, 1911, according to the evidence of the witness. There have been changes made in them since then, and, as they exist to-day, they are a later drawing.

Q. (By Mr. BLAKESLEE.) Will you point out what changes, to your knowledge, have been made in the showing of these blue-prints?

The COURT.—I understand the witness says, “Possibly.” Now, who made these drawings, and who made the changes? It seems to me we are wasting time by having this witness testify about these things when there ought to be some other witness who knows exactly about this. Is not that right?

Mr. BLAKESLEE.—That is right, your Honor.

The COURT.—Why waste time with this witness?

Mr. BLAKESLEE.—I want to show the extent of this witness’ knowledge, if he knows of any changes.

A. The changes that have been made are merely minor ones in regard to the dimensions. The general design of these drawings haven’t been changed from the general design of the articles themselves.

Mr. LYON.—We move to strike the answer from the record— [116—58]

The COURT.—Stricken out. It is all a conclusion of the witness.

Q. (Mr. BLAKESLEE.) Who made the original tracings of the drawings of those blue-prints?

A. A man by the name of Bandell.

(Testimony of E. C. Wilson.)

Q. Where is he at the present time?

A. I don't know.

Q. Have you attempted to locate him recently?

A. Not for eight or ten months.

Q. (By the Court.) Do the original drawings show the changes that have been made?

A. I think, your Honor, that the changes would be merely erasures of fractional portions of an inch or inches.

Q. Wouldn't that show on the original itself?

A. The paper here?

Q. No, no. On the original?

A. You could see that the erasure had been made and another figure substituted.

The COURT.—Yes. Now, if you will produce the original paper we can see just exactly what changes have been made.

Q. (By Mr. BLAKESLEE.) Can you produce the original papers at this time?

A. I think I can; yes, sir.

Q. Please take steps to do so.

A. I think they are at our shop among the records.

The COURT.—Bring them in in the morning. Pass to something else.

Q. (By Mr. BLAKESLEE.) In connection with introducing the Wilson reamer with the single-piece key, did you put out any printed matter for general circulation?

A. Yes, sir.

Mr. LYON.—Objected to, as irrelevant and immaterial, and [117—59] self-serving.

(Testimony of E. C. Wilson.)

Mr. BLAKESLEE.—We are showing the diligence of this party in connection with the question of priority, as to how generally he made this invention known. We are attempting to anticipate this patent and to show that this was the inventor. And that is material under all the decisions.

Mr. LYON.—It is merely a self-serving statement made after everything was done. We will concede, though, that they have been marketing the invention since June, 1911, and advertising and selling it.

The COURT.—Since June? Not prior to June?

Mr. LYON.—The earliest date they have proved is June.

Mr. BLAKESLEE.—Marketing it and selling it.

Mr. LYON.—Yes, sir.

Mr. BLAKESLEE.—And that they have been successfully operating it as early as July, 1911.

The COURT.—That is one admission they have made. Now, if you want another—

Mr. BLAKESLEE.—I ask counsel if they will admit, on the other question, that—

Mr. LYON.—I will take your proof on that. I don't want to be foreclosed from examining on that question.

Q. (By Mr. BLAKESLEE.) Can you produce any such printed matter at this time?

The COURT.—I thought you accepted the stipulation instead of the printed matter.

Mr. BLAKESLEE.—I wanted a specific showing of what it was.

Mr. LYON.—Then we withdraw the stipulation,

(Testimony of E. C. Wilson.)

and stand on the objection that it is irrelevant, immaterial and incompetent.

Mr. BLAKESLEE.—We are satisfied to prove it.

A. I can.

Q. (Witness produces booklet.) What is this booklet you have produced? [118—60]

A. This is a descriptive circular of the one-key type of Wilson under-reamer.

Q. When did you first, or how did it come about that you put out such a booklet, and when, and to what extent?

A. Probably the latter part of the year 1911 these books were produced. Maybe not until the first part of 1912. It is our custom to print a circular of the different articles we manufacture, and this was in keeping with that custom.

Q. And how extensively was it put out to the public?

Mr. LYON.—Object to that as irrelevant and immaterial, needlessly encumbering the record.

The COURT.—Objection overruled.

A. There were several thousand of them printed and mailed to different oil companies throughout California and the eastern oil fields, foreign oil fields.

Q. (By Mr. BLAKESLEE.) Can you in any way fix the time at which these booklets were printed and circulated?

A. I can probably show you the invoice. The photographs were made by Putnam & Valentine, of this city; and here are invoices and statements covering their charge for those photographs dated June 24, 1911.

(Testimony of E. C. Wilson.)

Q. And the statement is dated August 1st, 1911?

A. Here is a duplicate delivery tag from the Western Lithograph Company, delivering to the Wilson & Willard Manufacturing Company on January 13, 1912, 715 of these booklets. This was a portion of our order.

Mr. BLAKESLEE.—We offer in evidence the booklet just discussed by the witness, as “Defendants’ Exhibit Wilson Reamer Booklet of 1911,” and ask that the same be so marked and received.

Mr. LYON.—Objected to as incompetent, no foundation laid, and as irrelevant and immaterial.

(Discussion). [119—61]

The COURT.—Well, bring one decision in the morning; and, in the meantime, pass to something else.

Mr. BLAKESLEE.—We offer in evidence the bill and statement of Putnam & Valentine, attached together, as “Defendants’ Exhibit Putnam & Valentine Paid Photograph Account,” and ask that the same be received and so marked.

Mr. LYON.—Those are subject to the same objections before made.

The COURT.—I will overrule that objection.

Mr. BLAKESLEE.—We further offer in evidence the delivery slip of booklets referred to by the witness as “Defendants’ Exhibit Wilson Reamer Booklet 1911 Delivery Slip,” and ask that the same be received and so marked.

Mr. LYON.—Same objection.

The COURT.—Overruled.

(Testimony of E. C. Wilson.)

Q. (By Mr. BLAKESLEE.) Are you acquainted with the complainant, Robert E. Bole?

A. I am.

Q. How long have you known Mr. Bole?

A. Since the year 1904 or 1905.

Q. How did you come to first meet Mr. Bole?

A. Mr. Bole was an employee of the Bakersfield Iron Works, in Bakersfield, California, at the time I was manager of that institution.

Q. What was his work there?

A. He was a helper, or machinist.

Q. How long did you employ him?

A. Possibly a year at that place.

Q. How long did he continue in your employ at any other place?

A. He began as an employee at the Wilson & Willard Manufacturing Company's plant in the year 1907, I believe.

Q. That was at what place? [120—62]

Q. That was on Santa Fe Avenue, near 9th Street, in this city.

Q. What was the nature of Mr. Bole's work when so employed?

A. He was a machinist; worked on a machine or on a forge.

Q. How long did he continue in that employment?

A. Well, he did machine work for us, or shop work, for probably a year or so; maybe longer.

Q. Subsequent to that time did you have any relations with Mr. Bole? And, if so, what?

A. Yes, sir. Mr. Bole had a patent on an oil well

(Testimony of E. C. Wilson.)

pump. Mr. Willard, my partner in the Wilson & Willard Manufacturing Company plant, acquired a half interest in this patent and those pumps were manufactured by the Wilson & Willard Manufacturing Company, and Mr. Bole working in the shop part of the time, and part of the time in the field soliciting business.

Q. Did the department, or those interests, manufacture anything but the Bole pumps? And by that I mean the Bole Pump Company?

A. No, sir. Their patents covered the Bole pumps. I think that was all that we manufactured for them.

Q. Do you know whether the Bole Pump Company, or the Bole department—if we may call it that—of the Wilson & Willard Manufacturing Company ever manufactured any under-reamers or parts thereof?

A. No, sir; they did not. They were merely customers of the Wilson & Willard Manufacturing Company, with only one or two exceptions: They owned only one or two machines. They were little bits of lathes, of old style, which belonged to Bole personally and which were used in the manufacture of pumps. Aside from that the Bole Pump Company owned no machinery, and were not in the position to manufacture under-reamers or any other tools.

Q. On what financial basis were the dealings between the Wilson & Willard Manufacturing Company and the Bole Pump Company conducted?

(Testimony of E. C. Wilson.)

Mr. LYON.—Objected to as irrelevant and immaterial.

The COURT.—What is the materiality of any of that?

Mr. BLAKESLEE.—I wish to show the relations between these parties; and I am laying the foundation to prove the disruption of these financial relations, and the attendant circumstances which led up to this.

Mr. LYON.—All those matters were settled by contract in writing, and the fact that they were associated together has been shown. If those facts have any other relevancy or materiality you can readily state it.

Mr. BLAKESLEE.—I want to show that their relations became strained and that there was a certain time when they were disrupted.

The COURT.—You will admit that, Mr. Lyon?

Mr. LYON.—Yes.

(Discussion).

Q. (By Mr. BLAKESLEE.) Can you produce a memorandum of a settlement of certain matters which you had with Mr. Bole, of the Bole Pump Company, when you severed relations with him?

A. Yes, sir.

Q. (Witness produces a letter.) When was this settlement entered into?

Mr. LYON.—We object to that, on the ground that the document is the best evidence.

The COURT.—Do you claim it is a different date than the document bears?

(Testimony of E. C. Wilson.)

Mr. BLAKESLEE.—No, sir.

The COURT.—Then the document shows for itself, I wish you would read that instrument.

(Mr. Blakeslee reads paper).

(Discussion).

The COURT.—Now, you say you have a letter there. [122—64]

Mr. LYON.—That letter don't touch this settlement. It only goes to the question of whether Mr. Bole claimed they were estopped from using this invention.

The COURT.—Do you object to the letter?

Mr. LYON.—It is not germane to anything before the Court at the present time. I don't object to the letter if the rest of the correspondence is produced. (Discussion). I object to the letter so far as its use with reference to this settlement is concerned. So far as the settlement is concerned I contend it is embodied in this written instrument. If there is any other purpose of the letter, notice to quit using the invention, or anything of that kind, that is separate and distinct. But that portion of the letter which refers to any law suit between them has nothing to do with the question of whether or not this agreement of settlement can be set aside or amplified by parol evidence of a contemporaneous parol agreement based on the same consideration and not in writing.

Q. (By the COURT.) Mr. Wilson, who prepared this settlement? A. This agreement?

Q. Yes. A. I dictated that.

(Testimony of E. C. Wilson.)

Q. Who was present?

A. Mr. Bole, Mr. A. G. Willard, and Mr. W. W. Wilson. I believe they were present when I was dictating the document. They were there while the discussion was going on as to its terms.

Q. There was a disagreement? A. Yes.

Q. Did you have an attorney? A. Yes, sir.

Q. Who was your attorney?

A. Mr. F. A. Stephenson.

Q. Did you consult him about this settlement?

[123—65] A. No, sir; I did not.

Q. At the time you got up this settlement you had this letter that Mr. Blakeslee has?

A. Yes, sir; we had this letter. Mr. LYON.—Read the letter, if you want to.

The COURT.—I am inclined to think that letter ought to be read in evidence.

Mr. LYON.—Read it, then.

(Mr. Blakeslee reads the letter.)

The COURT.—The Court will adjourn until ten o'clock to-morrow morning.

Mr. LYON.—I understand that letter is offered in evidence the same as the contract of settlement, and in connection with it?

The COURT.—Sir?

Mr. LYON.—I say, I understand the letter has been offered in evidence by Mr. Wilson, and received, the same as the contract of settlement that was produced. Is that correct?

Mr. BLAKESLEE.—We haven't offered it, but we will, right now.

(Testimony of E. C. Wilson.)

The COURT.—I understand it was offered and read in evidence.

Mr. BLAKESLEE.—I beg pardon. My intention was to offer it in evidence as “Bole letter of January 17, 1911.”

(Adjourned until March 24th, 1915, at 10:00 o'clock A. M.) [124—66]

Wednesday, March 24th, 1915.

10:00 o'clock A. M.

Mr. BLAKESLEE.—Your Honor said yesterday that you wished a decision or two on this question of diligence.

The COURT.—Read the decision.

Mr. BLAKESLEE.—I have several decisions here. (Reads from 161 Federal Reporter, 122.)

The COURT.—That is simply putting the thing to a useful purpose; and, so far as I can see, that decision does not relate to anything about circulating literature.

Mr. BLAKESLEE.—That is part of the diligence of the inventor in putting it before the public. We wish to show what this inventor, upon whom the burden of proof is, did about the exploitation of his invention.

The COURT.—He has testified to that. He has testified that this company put this thing into use, and sold it, and that he also sent out circular advertisements. Now, the contents of those circulars do not seem to me to be material.

Mr. BLAKESLEE.—Excepting to show that they are of such nature as supports his testimony.

(Testimony of E. C. Wilson.)

The COURT.—I think it would be self-serving entirely.

Mr. BLAKESLEE.—It shows his campaign of diligence. The burden is on us to show that Wilson was the first inventor. He filed his application later, and we must show that he is entitled to this invention because of the full need of activity on his part, and I consider it important as far as possible to show such activity. If your Honor thinks it is surplusage, of course—

The COURT.—That is the way I look at it. The contents need not be stated. He has testified orally, and I apprehend there cannot be any dispute about the fact, that the defendants did manufacture this invention and sell it to the public.

Mr. BLAKESLEE.—Prior to the date of the application for the patent in suit. [125—67]

The COURT.—And he testified that he sent out circulars describing the invention.

Mr. BLAKESLEE.—But, in a way, your Honor, that is stating a conclusion, and this is offered to support what he states.

The COURT.—I think that is going too far.

Mr. BLAKESLEE.—I want the record to be as full as possible, although we don't wish to stuff it, and for that reason I request that it go in.

The COURT.—I sustain the objection to that written document offered in evidence—the pamphlet.

Mr. BLAKESLEE.—At this time I wish to offer in evidence a certified record, certified by the Acting Commissioner of Patents under date of the 8th day

(Testimony of E. C. Wilson.)

of December, 1914, setting forth the data of the application of Elihu C. Wilson, the present witness, defendant in this case, for patent for under-reamers, and the corresponding data pertinent to the application of the complainant Bole for letters patent in suit, and the data pertinent to the declaration of interference as to the subject matter of the letters patent in suit between the party Bole and the party Wilson as and particularly for showing the final steps in the activity of Wilson, which was a necessary final step if he is to prevail in any form as the rightful patentee—the final step in his race of diligence in presenting his application for patent, and it shows the party Wilson filed his application only twenty-seven days after the application by party Bole.

The COURT.—Do those documents claim that he is the inventor of this device?

Mr. BLAKESLEE.—No; that is not shown, I believe.

Mr. LYON.—In regard to the last offer, we object to it, on the ground that it is incompetent, not the best evidence; on the ground that it is immaterial; and upon the ground that it simply relates to a certain contest or suit or proceeding in a department [126—68] of the Government, the United States Patent Office, with which this court is not concerned; and upon the further ground that the alleged document is fragmentary, and that, insofar as there is any attempt to set forth the dates or serial numbers of the filing of the respective applications, the paper referred to is a mere recital, and not a certificate of

(Testimony of E. C. Wilson.)

that fact, and is not the proper method of proof. It has been held in this court that the proper method to prove the date of the filing of an application for patent is the certified copy of the application. That is the general rule, and there are a large number of decisions to that effect. To illustrate that, if your Honor has before you our exhibit of patent in suit, if you will turn to that you will find on the drawing and on the specification the recital of the date of application, of the filing of the application, and on the specification a recital. That has been held not to be proof, and to be a mere recital, and that the Court will require, if a party desires to prove such application dates, a certified copy of the record. Now, my objection is this, that that is a recital of a fact and not a copy of the record. There is no statute making such a certificate as this evidence, and the only thing that is evidence is a copy of the record itself, and that record is the file wrapper and contents of the application. That matter has been passed upon so often by the courts that there is no dispute of the question. That, of course, is not the only line of objection I make. We further object that this Court is not interested in any manner in these interference proceedings, and that if any part of the record is produced the whole of it should be produced and not a fragment.

Mr. BLAKESLEE.—I will state that we have ordered from the Commissioner of Patents a certified copy of the application of Mr. Wilson to which counsel refers; and that has not arrived, but I expect that

(Testimony of E. C. Wilson.)

it will arrive before the argument of the case. [127—69] As to the interference proceeding this is a certified statement by the Acting Commissioner of Patents that there is pending there this proceeding of interference, and I shall file with the Court, I hope, before the conclusion of the argument of this case, a certified copy of the decision, which I am informed has been rendered in that interference proceeding, on behalf of Mr. Wilson, and then shall attempt to show your Honor that the decisions are consistently to the effect that the decisions of that tribunal on questions of prior invention are highly persuasive to this court. So that it is material, and that certified document cannot do anything less than what it purports to do, namely, give the decision of this interference and the respective data. That is one step in our showing of diligence—that application to file, and that we are contesting this patent in suit.

The COURT.—What is the purpose of this offer of this particular paper?

Mr. BLAKESLEE.—I have stated, I think, the purposes.

The COURT.—“This is to certify that the annexed is a true copy from the records of this office of the declaration in interference”—. (Reads.) Now, that purports to be a copy from the records. It don't read like a copy from the record, but it is certified that it is a copy from the records, and it is dated January 21, 1914. There is a statement of what the claims are.

(Testimony of E. C. Wilson.)

Mr. LYON.—I do not maintain that if the preliminary statements there are material, or anything of that kind, that this is not a true copy of them and introducible in evidence.

The COURT.—What is that?

Mr. LYON.—I do not claim that if the preliminary statements are proper to be offered in evidence this is not proper evidence of it. My objection is that that don't purport to be more than a mere recital. It is not a certificate of the record of the [128—70] filing of either of those applications.

The COURT.—This is a certified copy of the record. (Discussion.) This certifies that it is “a true copy of the records of this office of the declaration of interference dated January 21, 1914.” Now, it can't be received for anything else except what it purports to be a certified copy of. If you object that that is not the true date of the filing of this instrument, and want to prove it is not the date—

Mr. LYON.—Not of that instrument. We object on the ground that it is a mere recital, so far as it sets forth any dates or serial number or numbers of any alleged application or applications.

The COURT.—You can argue that on the argument of the case. The document will be received in evidence.

Mr. LYON.—The other phase of the question is that I don't see where the materiality of it comes in. This proceeding in the Patent Office is an independent proceeding and has no bearing on this case. We are entitled to and will have here a new hearing on

(Testimony of E. C. Wilson.)

a new record, *de novo*. The question here is an entirely different one from the one there.

The COURT.—I agree with you in that regard. But Mr. Wilson claimed the right to a patent on this invention prior to the expiration of two years. That is certainly material here.

Mr. LYON.—That is the one fact as to which I object that this instrument does not prove.

The COURT.—I don't know whether that is sufficient proof on that subject, now. I can't decide that now.

Mr. BLAKESLEE.—We wish to argue that.

The COURT.—Proceed with your case.

Mr. BLAKESLEE.—We ask that this be marked "Defendant's Exhibit Certificate of Patent Office as to Wilson vs. Bole Interference."

The CLERK.—That will be Defendant's Exhibit 3. [129—71]

Q. (By Mr. BLAKESLEE.) Referring to this letter which was read late last evening, in connection with the argument that it shows that the party Bole, being under debt to the party Wilson, and under such circumstances did make, at that time, and at that late date, this claim that he was entitled to something in and about this invention—I want to ask the witness further some questions with relation to the matter. Will you please state what, if anything, transpired at the time you settled certain matters with Mr. Bole, on or about the 1st of February, 1913, namely, in connection with this key matter referred to by Bole in this Exhibit "Bole Letter of January 17th, 1913."

(Testimony of E. C. Wilson.)

Mr. LYON.—That question is objected to, on the ground that it appears that the settlement referred to was consummated by a contract in writing, and that this is simply an attempt to change, alter, vary and modify the terms of such contract in writing by parol proof of an oral contemporaneous agreement. Therefore it is incompetent for any purpose.

The COURT.—(After argument.) I will let any evidence of what they said between themselves in and consider on the argument whether or not it bears any weight on the subject of proving prior invention.

A. A few days after the receipt of this letter, my partner, at that time Mr. A. G. Willard—

Mr. LYON.—I object, on the ground that the witness is not confining himself to the question.

A. (Continuing.) After some delay—I was unable to have a conversation with Mr. Bole. A few days after this letter was written, at Mr. Willard's suggestion I met Mr. Bole and discussed the subject of this letter. I attempted to explain to Mr. Bole that he did not know when a man was trying to be friendly toward him and when he was endeavoring to help him, as we had for a long time; and before the conversation was through Bole seemed to have [130—72] a very different opinion—

The COURT.—Now, Mr. Wilson, I wish you would, so far as it is possible, state what was said by you and what was said by Mr. Bole. Don't tell what you conclude was the meaning of what was said, but state what was said.

A. I said to Mr. Bole, "You don't know when a

(Testimony of E. C. Wilson.)

man is trying to befriend you. You have neglected your business, and you know it, and in my effort to help you out I have sent some dunning letters out to customers who are away in arrears of your account for money you should have had long ago. This is only in line with what I did when we were managing the business for you, and I don't see that we have injured your business by so doing." Mr. Bole replied he was probably hasty in writing this letter, and if he had it to do again he probably would not do so. I said, "Now, in regard to any claim to the invention of this key you have in mind, why haven't you told me before you thought you were the inventor of it? This is the first intimation I ever dreamed of that you claimed any part whatever in the invention of that key." He said, "Well, be that as it may, I will do nothing further with it, anyway. If we can get our accounts here settled satisfactorily, I will do nothing further with the key." Now, after having these preliminary terms of this agreement discussed between Mr. Willard, Mr. Bole and my brother, W. W., and myself, I dictated this agreement which is in evidence, and at the time of dictating it I had the idea that it had no part—

The COURT.—Don't state what you had the idea of.

A. (Continuing.) It was my opinion.

The COURT.—That is not material. State what was said between you and Mr. Bole.

A. (Continuing.) Mr. Bole said if he could get a satisfactory settlement of his account he would do

(Testimony of E. C. Wilson.)

nothing further with [131—73] the key matter. I was endeavoring to explain why I wished to put it in that agreement.

The COURT.—That is not material.

Mr. LYON.—I move to strike the entire answer from the record, and exclude it from consideration, on the grounds stated in the objection.

The COURT.—I think the evidence he has given is relevant and material, and it will stand.

Q. (By Mr. BLAKESLEE.) Can you state any further, or with any further particularity, anything that was said by yourself or Mr. Bole at that time?

Mr. LYON.—We object to that, on the ground that that is not the proper method of proving a conversation. The witness has not been asked whether he has given the whole conversation.

The COURT.—I think the witness is entitled to testify to the whole conversation, and I will permit the counsel to suggest to the witness any part of the conversation that the witness may have overlooked. Of course, the value of testimony coming in that way is different from the value of testimony that the witness is able to state without being led or directed; but we are entitled to all of the evidence on that subject.

A. You refer to the time this contract was written up?

Q. (By Mr. BLAKESLEE.) Yes.

A. When the contract was returned from the stenographer, I was reading a copy of it and Mr. Bole was reading a copy of it, and Mr. Bole stated, "I see you have made no mention of the key matter

(Testimony of E. C. Wilson.)

in this agreement." I replied, "Bob, I don't believe it has any place in this contract. This is a contract between the Bole Pump Company and the Wilson & Willard Manufacturing Company; and whatever agreement. if you think you have any rights at all to this key, that would be made between you and I, [132—74] would be a personal matter. But, it may be a part of this contract, in consideration of the contract, as you suggested that if you can get a satisfactory settlement of this pump account you would agree to waive any claim that you may have to this key—" I said, "It may to that extent belong in this contract; but I hardly think it does." Now, I probably should have gone to a lawyer.

The COURT.—That will be stricken out. While it has no place in this case, it is probably true.

Q. (By Mr. BLAKESLEE.)—Did Mr. Bole say anything further at this time in that connection?

A. Mr. Bole replied, "Well, I will do nothing further with the key matter. I will give you no further trouble with that."

Q. And when had Mr. Bole first asserted to you, or when had you first received knowledge of his assertion, or any right whatsoever with respect to the origination of the single-piece key under discussion?

Mr. LYON.—Object to that as leading, and as incompetent, calling for the conclusion of the witness. The witness might state the facts.

The COURT.—I will overrule the objection.

A. This letter of January 17th, written by Robert E. Bole, is absolutely the first intimation that ever

(Testimony of E. C. Wilson.)

came to me, or notice, that Mr. Bole claimed to be the inventor of that key.

Q. (By Mr. BLAKESLEE.) Are you acquainted with Edward Double, the president of the Union Tool Company, one of the complainants in this case?

A. I am.

Q. What line of business is he engaged in?

Mr. LYON.—Object to that as irrelevant and immaterial in this case.

The COURT.—I don't see the materiality of that. (Argument.) [133—75] I sustain the objection.

Q. (By Mr. BLAKESLEE.)—I will ask you if you have produced this morning the original shop tracings of May and June, 1911, which the Court requested you to bring with you, namely, the tracings of Wilson under-reamers with the single-piece key.

Mr. LYON.—I object to the question insofar as it assumes that that tracing was made at the time indicated.

The COURT.—Objection overruled.

A. (Witness produces two tracings.)

Q. (By Mr. BLAKESLEE.)—Will you please state when these tracings were made, to your knowledge.

Mr. LYON.—Objected to, on the ground that it is incompetent, no foundation laid, the witness not having qualified to answer the question. It already appears they were made by some draughtsman.

Mr. BLAKESLEE.—Nevertheless the witness may know when they were made.

(Testimony of E. C. Wilson.)

A. These tracings were made in May or June of 1911.

Q. And where have they been since that time?

A. In our files in the office of the Wilson & Willard Manufacturing Company.

Q. Have they since that time in any respects been altered, and if so, please state, so far as you know?

A. There have been a few alterations made in regard to the length of this tool, and the length of the tee, and the area of a small bearing-face. This dimension J on the tee-bar has been changed from its original dimension, either increasing or diminishing that dimension. I don't know. The thickness of the drive-keys has been altered. The taper and length of the pilot-keys has been changed somewhat. Also the thickness of the wedge-key has been altered.

Q. Has any alteration been made in these tracings with respect [134—76] to that part thereof which discloses this single-piece key and is marked on the tracings "Drive-key—steel"?

A. No, sir.

Q. (By the COURT.) Do these figures that have been changed in any way relate to that?

A. They relate merely to the thickness of material of which the key was made.

Q. (By Mr. BLAKESLEE.) Do the changes in any way relate to the face dimensions of such key?

A. No, sir; I believe not.

Mr. LYON.—We move to strike the answer from the record on the ground that it is not responsive to

(Testimony of E. C. Wilson.)

the question. The belief or opinion of the witness is not competent.

The COURT.—Motion granted.

Q. (By Mr. BLAKESLEE.) To your knowledge have any changes been made in these tracings, or in the dimensions depicted thereby, with respect to the superficial area of this last identified key and of the flat face thereof?

Mr. LYON.—We object to that as leading. This witness is an intelligent man, and if they will ask him what changes there are there he will state.

The COURT.—I suppose these drawings show for themselves, don't they, if there have been any alterations made?

Mr. LYON.—They ought to.

The COURT.—Unless there has been something added to the drawings. Let me ask the witness.

Q. When did you first see those drawings?

A. I saw them while they were being made, in May and June, 1911.

Q. Did you see them just after they were completed? A. Yes, sir; and many times since.

Q. Now, has there been anything added to those sheets, in [135—77] the way of drawing, since 1911?

A. The only changes, your Honor, are merely slight details, in order to use standard stock or materials which we could buy.

Q. I understand that. In the drawings themselves have there been some changes? You spoke awhile ago about changing these figures. Now, have there

(Testimony of E. C. Wilson.)

been any changes in the drawing?

A. There have been one or two pencil changes on the drawings, yes, sir.

Q. Is the ink the same?

A. The ink has not been changed.

Q. Has there been any change in the drawing of the "drive-key—steel"? A. No, sir; no change.

Q. You are sure that drawing was on there when this drawing was made in June, 1911?

A. Yes, sir.

Q. And you saw it at that time? A. Yes, sir.

Mr. LYON.—I suppose the purpose of the examination is to offer these in evidence. I would like, before the offer is considered, to cross-examine the witness for a moment.

The COURT.—Certainly. You have a right to cross-examine him. Are you done, Mr. Blakeslee?

Mr. BLAKESLEE.—On that score, yes.

(By Mr. LYON.)

Q. You stated, I believe, there has been nothing added to these drawings since they were made and when you first saw them completed, in May, 1911?

A. I stated that some pencil outlines had been added.

Q. That is all?

A. That is all I see now. [136—78]

Q. Now then, please turn to the right-hand side, "Revisions." The first you find there is "Revised 8-1-11," meaning August 1st, 1911, does it?

A. "Revisions"; yes, sir.

Q. Then that was the time that this so-called

(Testimony of E. C. Wilson.)

“pilot-key” was put on this drawing, wasn’t it?

A. I am not sure whether that is what that statement means or not.

Q. You don’t know what that means, then?

A. No.

Mr. LYON.—That is all. We renew our objection, on the ground that there is no foundation laid.

The COURT.—Now, as I understand, there was some other man made these, although they were made under his supervision. Is he here?

Mr. BLAKESLEE.—Yes, sir. He is not here, and cannot be reached.

Q. Can he? Bandell?

A. No; the last we heard of Bandell he was in Chicago. [137—79]

Q. Have these tracings been in regular shop use since that time?

Mr. LYON.—Objected to as incompetent and no foundation laid.

The COURT.—That is calling for the conclusion of the witness.

Q. (By Mr. BLAKESLEE.) How have these tracings been used since the time they were made?

Mr. LYON.—Objected to as leading and assuming a fact not testified to by the witness and not appearing that he has any personal knowledge that these things as they now stand have ever been used since they were made in 1911.

The COURT.—I think he can state what he knows about that subject.

A. These tracings were used in making blue-prints

(Testimony of E. C. Wilson.)

which were sent to the shop and which were observed in manufacturing the Wilson under-reamers.

Q. (By the COURT.) Who made the blue-prints?

A. Many of these blue-prints we have made by a concern who do that business in the Bryson Block in this city.

Mr. BLAKESLEE.—We wish to offer these in evidence, but I want the witness to state if it is possible for them to conduct their business without these tracings.

The COURT.—You can offer them and if you want to subsequently withdraw them after the trial you can substitute blue-prints. Have you any objection to that, Mr. Lyon?

Mr. LYON.—No, I haven't any objection to that, but I have an objection to the offer.

Mr. BLAKESLEE.—We offer in evidence the two tracings.

The COURT.—The documents will be received.

Mr. LYON.—I supposed I might have an opportunity to state that we object to them on the ground that they are incompetent and no foundation laid, and unidentified.

The COURT.—I understand that you made that objection, and it [138—80] is overruled.

Q. (By Mr. BLAKESLEE.) During the early stages of your development of this Wilson reamer with the single-piece key, did you put the matter before anyone as to the general nature of the key in any respect in letter form? A. Yes, sir.

(Testimony of E. C. Wilson.)

Q. To whom did you address any such communication?

A. I remember a letter I addressed to Mr. J. A. Kibele, Bakersfield.

Q. Can you produce that letter?

A. I can produce a copy of it.

Q. Have you attempted to get that letter?

A. I was in Bakersfield Sunday and attempted to get in touch with Mr. Kibele for the purpose of getting that letter, but he was out of town.

Mr. LYON.—Produce your letter-press copy. I am not going to object to it.

Mr. BLAKESLEE.—The witness produces a letter-press book of the Wilson & Willard Manufacturing Company, containing such letter, and we ask that the same be copied into the record.

Q. (By Mr. LYON.) You signed this letter yourself on the day it bears date, did you not, Mr. Wilson?

A. I did.

(Mr. Blakeslee thereupon reads said letter in evidence, as follows:) [139—81]

“Feb. 28, 1911.

Mr. J. A. Kibele,
Bakersfield,
California.

Dear Sir:

Your very kind favor of the 26th inst., concerning position for Tool Dresser is to hand. Have wired our party that we can hold the position for one week. Will let you know at once on receipt of Wire whether to hold the position for him or not. We thank you

(Testimony of E. C. Wilson.)

very kindly indeed for your attention to this matter, and you can be assured we appreciated it very much.

We are just making another change in our Underreamer which we believe will please you. We find that we can increase the strength of the *slotted Tee*, Making it at least twice as heavy. By making it of Nickel steel and with more than twice the weight of stock in it than it had before. Believe we will have the strongest Reamer we have ever had. Instead of the double keys or wedged keys previously used, we have devised a key of a single piece. It is as broad as the two keys combined, which we previously used, which will make it stronger than they were. It can be driven in under the Spring, taking up the tension on the spring. It has a shoulder at the bottom which goes down into the bore of the Reamer, preventing it from working out either way, as the compression of the Spring holds it down into place. Either end can be pried up with a screw driver or coal chisel, and can be driven right out. We are going to put in the bottom bolt.

The slotted tee of course strikes against the key before it can be drawn down far enough to strike the bottom bolt. Thus the bending or jamming of the bottom bolt will be stopped. All who have seen this Reamer think it is the best thing we have ever devised. We draw a sketch herewith to show the shape of the key. What do you think of it?

Yours very truly,

WILSON & WILLARD MFG. CO.,

Per E. C. WILSON,

Pres." [140—82]

(Testimony of E. C. Wilson.)

The COURT.—What is the date of the letter?

Mr. BLAKESLEE.—February 28, 1911, namely, twenty-five days subsequent to the date of the order for making the reamer 120 with the single-piece key.

Mr. BLAKESLEE.—I understand there was some objection previously to offering these blue-prints of these tracings, and I take it now that they need not be offered in view of the tracings being produced. Also, as to the offer of the shipping receipt for the Norbeck & Nicholson Company reamer and the Kern Trading & Oil Company reamer, may those be received?

The COURT.—They can be marked.

Q. (By Mr. BLAKESLEE.) Will you please state if you know when this reamer in evidence "Defendant's Exhibit 1," was made.

A. It is one of our recent productions, made in the last month or so, I should say.

Q. Please compare the same or contrast the same with reamers with the single-piece key which you made prior to February 19, 1913, the date of the Bole application.

Mr. LYON.—Do you claim that it is any different?

Mr. BLAKESLEE.—I hope he will say that they are the same.

Mr. LYON.—I am ready to concede that they are the same unless you claim that they are not.

Mr. BLAKESLEE.—No; I just want the record to show.

The COURT.—Well, that statement then is sufficient.

(Testimony of E. C. Wilson.)

Q. (By Mr. BLAKESLEE.) Prior to your making out the order of February 3, 1911, for making over reamer 120 to include the single-piece key, will you please state whether or not Mr. Bole of the complainants ever put before you or brought to your attention or made known to you in any manner directly or indirectly a single-piece key in any respect the same or like that disclosed in the exhibit reamer before us, "Defendant's Exhibit No. 1"?

Mr. LYON.—We object to that as leading and as incompetent, [141—83] calling for a conclusion of the witness, and not for a statement of facts.

The COURT.—The objection is sustained.

Q. (By Mr. BLAKESLEE.) Prior to your making out the order for changing over reamer 120 to include the single-piece key, had you received from Robert E. Bole, of complainants, any information with respect to the single-piece key such as embodied in that under-reamer?

Mr. LYON.—I object to that as leading and calling for a conclusion.

The COURT.—That is calling for a conclusion of the witness, Mr. Blakeslee. Ask him to tell all that Mr. Bole ever said to him about the thing. That is the way to get at it. If he didn't say anything, he can say so.

Mr. BLAKESLEE.—Of course, it might be by some other method than statement, whether it was put before him in any way.

Q. Did Mr. Bole put before you in any way prior to your making out the order for making over reamer

(Testimony of E. C. Wilson.)

120 with this single-piece key such as was finally built into that reamer, and by that I mean the key as a design, construction or the like?

Mr. LYON.—I object to that as leading, incompetent, calling for the conclusion of the witness.

The COURT.—Let Mr. Wilson state whether Mr. Bole ever exhibited or said anything to him about a key that he invented prior to this time.

A. He did not.

Q. (By the COURT.) No key at all?

A. No key whatever.

Q. He never said anything to you on the subject prior to the receipt of this letter?

A. Not about a key.

The COURT.—Is that what you want, Mr. Blakeslee?

Mr. BLAKESLEE.—Yes, sir. Of course, we admit that there was [142—84] discussion about prying out the key, but what I mean is the key itself and its design.

The COURT.—He testified what Mr. Bole said about prying out the key.

Q. (By Mr. BLAKESLEE.) At all times when you have referred in your testimony to the Wilson & Willard Manufacturing Company and yourself, are we to understand that you have referred to the defendants in this case?

A. Yes, sir.

Mr. BLAKESLEE.—Counsel may cross-examine.

(Testimony of E. C. Wilson.)

Cross-examination.

(By Mr. LYON.)

Q. Mr. Wilson, when was it that the enlarged slotted tee-bar was first completed for the rebuilding of reamer 120 at the shop of the Wilson & Willard Manufacturing Company?

A. I do not remember the exact date. Our records will show that.

Q. Have you such records before you?

A. I believe we have.

Q. Refer to them and answer the question.

A. These are the cards of the key. I want the cards of the tee, if we have them here. It may be that they are not here at all. The time-cards turned in by the machinists reporting the work done on that tee, the last card turned in bears the date February 27, 1911. That would be the date the tee was completed.

Q. And it is your present recollection that that enlarged slotted tee was completed on February 27? Is that correct?—1911?

A. That is what the records show.

Q. You testified in the interference in the United States Patent Office, No. 37,126, did you?

A. Yes, sir. [143—85]

Q. And you testified that this work referred to was done under the supervision of the foreman, Mr. Knapp? A. Yes, sir.

Mr. BLAKESLEE.—We ask that the witness be confronted with his testimony without any conclusions being placed upon it in advance.

(Testimony of E. C. Wilson.)

Q. (By Mr. LYON.) You heard Mr. Knapp's testimony in that case, that this special tee was not finished until March 8, 1911, didn't you?

Mr. BLAKESLEE.—The same objection.

The COURT.—I think that is a pertinent question.

Mr. BLAKESLEE.—The witness is entitled to be confronted with his testimony without any conclusion being placed on it.

A. I don't remember the testimony in that regard.

Q. (By Mr. LYON.) Please tell us when reamer No. 120 was completed and first assembled in its revised form with this single-piece key.

A. The work was completed on the reamer ready for assembling on February 27, 1911.

Q. You were asked on your direct examination in said interference preceeding the following question and gave the following answer, were you "Q. —126 From your own knowledge, as near as you can give it, when was this work completed on this shop order No. 6904? A. That order was completed on April 14. That is, the last cards turned in on that order bear the date April 14, and they are blacksmith work and blacksmith helper work."?

A. That is the day the reamer was tempered, but that didn't prevent it being in position to assemble.

Q. You gave that testimony that I have read?

A. The last card is for tempering—

The COURT.—Answer the question, whether you testified as he read it. [144—86]

A. I think I did.

(Testimony of E. C. Wilson.)

Q. (By Mr. LYON.) And you were asked in that same matter the following question and gave the following answer, did you: "Q.—Now, I notice that this drawing bearing the date 4-22-11, and that shop order 6904 of the 'Wilson Exhibit, February, 1911, Wilson & Willard Manufacturing Company Shop Record Slips' bears the date 4-22-11. Is there any significance in such datings? A. In accordance with my instructions to the foreman and my instructions to the foreman of the blacksmith-shop as well, and, in fact, all foremen that we ever had, when they complete an order they are to note thereon the date that the order is O.K.'d by them and turned in to the office. In other words, the day they are finally done and through with the work. And that is the notation on this order No. 6904, and also the notation in the red pencil of 4-22-11 on the drawing of this tee and key. That is the date on which our foreman, Mr. Knapp, completed the order and checked it over and delivered it into the office." Did you give that testimony? A. Yes, sir.

Q. Are you prepared to state of your own recollection and knowledge that this reamer 120 was assembled in your shop at any time prior to March 8, 1911, with the single-piece key device therein?

A. Yes, sir.

Q. On what date was it so assembled with the single-piece key device mounted therein?

A. We assembled the reamer the very moment we got the parts completed. We were anxious to see it assembled.

(Testimony of E. C. Wilson.)

Q. Was the slotted tee complete at that time?

A. Yes, sir.

Q. When was it that this man Houriet first put this slotted tee-bar into that reamer No. 120?

A. I don't remember. [145—87]

Q. And when was it that he first inserted the one-piece key in place in such enlarged slotted tee-bar in reamer No. 120?

A. I don't remember whether he was the first man who assembled the reamer or not.

Q. When was it that he made this discovery, as you have referred to, that the key could be pried up with the tang or sharp end of a file?

A. Sometime after February 27, 1911.

Q. How long?

A. Probably—that would be a guess; I couldn't tell you how long.

Q. Was it prior to March 8, 1911?

A. I don't know.

Q. Will you state positively that it was not after March 8, 1911, that he made this discovery?

A. I don't remember the date that he made the discovery.

Q. To whom did you exhibit this under-reamer No. 120 with this enlarged slotted tee-bar mounted therein and the single-piece key in place holding the spring and tee-bar in place in the reamer, prior to March 8, 1911?

A. I suppose every man in our shop saw it.

Mr. LYON.—I move to strike the answer from the record as not responsive to the question and a mere

(Testimony of E. C. Wilson.)

conclusion of the witness.

The COURT.—The motion is granted. Read the question to the witness.

(Question is read.)

A. I don't recall who it was or who they were.

Q. (By Mr. LYON.) Will you state positively that prior to March 8, 1911, it was so assembled in the shop of the Wilson & Willard Manufacturing Company at any time? A. Yes, sir. [146—88]

Q. On what day? I don't know what the witness is doing, but I am asking him. He pretended to be able to answer without referring to other papers, and I would prefer very much to have his recollection first independent of any reference to anything that is not in evidence.

A. We assembled them the day the materials were completed ready for assembling.

Q. You say "we." Who did that?

A. The machinists in the shop.

Q. Who were the machinists that did that?

A. I don't remember.

Q. Were you present? A. Yes, sir.

Q. What time of the day was it?

A. I don't remember.

Q. Was it prior to March 1, 1911, that that was so assembled? A. Yes, sir.

Q. Who saw the reamer besides yourself on that day? Name a single person? A. Mr. Knapp.

Q. And this slotted tee-bar—the enlarged slotted tee-bar was in the reamer at that time?

A. Yes, sir.

(Testimony of E. C. Wilson.)

Q. How did you remove the key the first time the reamer was assembled with the single-piece key therein? A. With a lever.

Q. Explain to us how.

A. The key was so designed by having a notch at either end in the lower edge, that when a certain shaped lever was placed underneath the key it could be pried upwardly and outwardly.

Q. And for how long did you use that lever before Mr. Houriet made this discovery that the tang end of a file could be used to [147—89] pry the end up?

A. I have stated that I don't remember.

Q. What is your best recollection?

A. I should say it had been two or three weeks.

Q. It might have been four weeks?

A. I couldn't say as to that.

Q. What time of the day was it that you called this conference together of Mr. C. E. Wilcox, Arthur G. Willard, W. W. Wilson, your brother, and Mr. Knapp and Mr. Robert E. Bole, one of the complainants?

Mr. BLAKESLEE.—We object to that as immaterial. It is a matter of over four years ago, and the exact time of the day is not material.

The COURT.—I will take the testimony. The objection is overruled.

A. It was in the afternoon.

Q. (By Mr. LYON.) And where was this conference called?

A. In the rear of our machine shop.

Q. And how was such conference called?

(Testimony of E. C. Wilson.)

A. By word of mouth.

Q. Did you ask each one of these men to meet you there? A. I don't believe I did.

Q. What do you mean then that you called a conference?

A. We conferred in regard to the key and discussed the matter.

Q. Then it was an accidental meeting rather than a called conference? Is that the idea which you now wish to convey?

A. Yes, sir; I did not appoint any specific time that we were to meet.

Q. Did you not in your testimony in the interference proceeding to which I have already referred, testify "I called together some of the boys in the shop—some of our men—among whom was W. W. Wilson, A. G. Willard, C. E. Wilcox and R. E. Bole, to get their [148—90] opinion as to which was the better type of a key"? A. That is right.

Q. When was it that you called these men together? A. At the time of the meeting.

Q. And when was that?

A. That was one afternoon sometime; I should say February 1, 2 or 3, of the year 1911.

Q. And you fix that date solely by the fact that it was after the receipt of this Williams letter which has been offered in evidence which was received by you on January 30, 1911? A. Not altogether.

Q. By what other circumstance?

A. Immediately after that conference I dictated an order which was for the purpose of changing over

(Testimony of E. C. Wilson.)

reamer No. 120 to the new slotted tee type.

Q. Was that order dictated the same day as this conference?

A. I am not sure as to that.

Q. Do you remember what your testimony in the interference case was in regard to that fact?

A. No; I do not remember.

Q. And you mean to testify that prior to that conference you never had had any talk whatever with Robert E. Bole, Charles E. Wilcox, W. W. Wilson, A. G. Willard or Mr. Knapp in regard to this single piece key? Is that correct?

Mr. BLAKESLEE.—Objected to as placing an arbitrary interpretation on the testimony of the witness. Let him testify without putting the words into his mouth.

The COURT.—He has a right to ask leading questions of a witness on cross-examination.

A. No, sir; I do not wish to testify that way.

Q. (By Mr. LYON.) With which one of these men had you conversed prior to that conference or alleged conference in regard to this [149—91] single-piece key device?

A. There is a bare possibility that I conversed with W. W. Wilson and A. G. Willard prior to that meeting.

Q. Now, barring the bare possibility, have you any recollection so that you will state positively that you did or did not talk with either one or both of the men mentioned by you, W. W. Wilson or A. G. Wil-

(Testimony of E. C. Wilson.)

Willard, regarding that subject-matter, prior to that alleged conference?

A. As to A. G. Willard, I think I will testify positively that I did not. I possibly did with W. W. Wilson.

Q. Now, you say "possibly." What is your present recollection? Did you or did you not discuss that with your brother W. W. Wilson prior to that alleged conference?

A. I will not say positively whether I did or did not.

Q. What portion of the shop of the Wilson & Willard Manufacturing Company did this alleged conference take place in?

Mr. BLAKESLEE.—Objected to as having already been testified to by the witness and merely repetitious.

The COURT.—It is repetition.

Mr. LYONS.—He says it was in the shop. I ask what portion of it. He says simply in the rear.

A. I testified that it was in the rear of the shop.

Q. What portion of the rear of the shop? I want to know where it was.

A. It was near one of our shapers.

Q. Tell us where that shaper was located in the shop.

A. The reamer was lying on the floor near the shaper in the rear end of our shop.

Q. Which side of the shop was that?

A. About the center of the building.

Q. And towards which side of the building were

(Testimony of E. C. Wilson.)

you and these other gentlemen standing at the time that you started this [150—92] conference?

A. Oh, I don't remember that.

Q. You won't pretend to tell us?

A. I know that we were talking over this under-reamer that was lying on the floor near this shaper. I don't remember whether I was facing east or west.

Q. Who was present when that talk started?

A. Mr. Arthur G. Willard, Mr. Robert E. Bole and I believe Mr. Knapp and Mr. W. W. Wilson.

Q. When you say you believe, do you believe that W. W. Wilson was present at the start of such alleged conference, or do you want to state positively that he was there at the commencement of that conference?

A. I won't state positively that he was there at the commencement. I don't remember.

Q. And where was Mr. C. E. Wilcox at that time?

A. I believe he was in the party at the conference sooner or later, but whether he was there in the beginning of the conference, I don't remember. I believe he was there.

Q. Did you invite him to take part in that conference?

A. I don't remember whether I invited him to or not. I think if I remember rightly he came up after we had been discussing the matter a little while and I asked him about it.

Q. Did he make any remark of any kind during that alleged conference?

A. I don't remember whether he did or not.

(Testimony of E. C. Wilson.)

Q. About what time was it that your brother W. W. Wilson appeared during that conference?

A. I don't know what time of the conference.

Q. How far from the place of the conference was the shipper's desk or shipping desk?

A. The shipper's desk was probably 15 or 20 feet away. [151—93]

Q. In what direction?

A. Still further toward the rear end of the shop.

Q. And how far from the shipping door was that desk?

A. About three feet; two or three feet.

Q. And still further away from where this under-reamer was? Is that correct? A. No, sir.

Q. Was it closer than the shipper's desk?

A. The door was probably closer to where we stood than the desk; yes, sir.

Q. You were still further to the rear of the shop than the shipper's desk? Is that it?

A. The door is more directly on a line from where we stood to the end of the desk than the shipper's desk.

Q. At what time during that conference were you, A. G. Willard and Robert E. Bole at the shipper's desk?

A. Probably the latter part of the conference.

Q. You were not there before going over to the under-reamer? A. I don't remember.

Q. Prior to the conference taking place, at which you took part, A. G. Willard took part, Robert E. Bole took part, your brother W. W. Wilson took

(Testimony of E. C. Wilson.)

part, and you think C. E. Wilcox took part, and Knapp, you think was present,—prior to that conference at this under-reamer were you with Robert E. Bole and A. G. Willard at this shipping desk discussing and making sketches?

A. Prior to the conversation?

Q. Prior to the conversation that you have referred to. A. No, sir.

Q. You heard the testimony given by C. E. Wilcox in the interference proceeding or read it, did you?

A. I heard part of it if not all, yes, sir.

Q. You heard his testimony that you and Mr. Bole and Mr. Willard [152—94] were huddled over this shipping desk and that you and Bole had pencils in your hands and were making sketches, did you? A. I heard that testimony, yes, sir.

Q. And that you stepped back from the desk with a sketch in your hand, and said, “I see how you can get it in there, but I don’t see how to get it out,” and Robert Bole replied, “Why, pry it out.” You heard that testimony?

A. I don’t remember whether those were the exact words or not. I know there was something of that character testified to.

Q. What have you to say with regard to Mr. Wilcox’s testimony that you and Mr. Willard and Mr. Bole were sketching or making sketches at this desk and that you and Bole each had pencils in your hand and that you stepped back and made the remark about the single-piece key and that you saw how it

(Testimony of E. C. Wilson.)

could be gotten in but you could not see how it could be gotten out, and Robert E. Bole spoke up and said, "Why, pry it out," or words to that effect?

Mr. BLAKESLEE.—We object to this unless the witness is shown the testimony. The witness is not being interrogated as to his testimony, but as to the testimony which counsel is testifying to and in another proceeding. Counsel is purporting to tell this witness something about another proceeding.

Mr. LYON.—I am only asking what he has got to say in regard to the fact.

The COURT.—I don't know whether the rule in regard to a witness being shown his own testimony has the same relation to the testimony written out of other witnesses. The rule is that a witness, if he is interrogated about a writing, should be shown the writing. Now, I don't know, but I presume the way you gentlemen are talking, this evidence was put in writing.

Mr. BLAKESLEE.—It has not been shown that this witness was present when the witness testified. The testimony has been reduced to writing, and it simply amounts to counsel pretending to [153—95] repeat something which the witness may know nothing about.

Mr. LYON.—We will avoid all this controversy and save time. Modify the question to read, "If Mr. Wilcox so testified, or testified in this case, what have you to say in regard to the truth or falsity of such testimony?"

The COURT.—I will sustain an objection to that

(Testimony of E. C. Wilson.)

question. You have no right to ask this witness that.

Mr. LYON.—I withdraw the whole proposition. It is not of enough consequence to follow up lengthily.

Q. Were you, Mr. Bole and Mr. A. G. Willard at that shipper's desk prior to turning to the under-reamer and prior to your making the remark with a sketch in you hand, that you saw how the single-piece key could be gotten into the reamer, but did not see how it could be gotten out, or words to that effect, and Robert Bole spoke up and said, "Pry it out"?

Mr. BLAKESLEE.—Objected to as indefinite. We don't know what counsel means by "prior to turning to the under-reamer."

The COURT.—I will overrule the objection.

A. I think not.

Q. (By Mr. LYON.) Are you prepared to state positively that you were not there?

A. I am prepared to state positively that the first time I said that I did not see how I could pry it out was before we went to the table, before we went to the desk.

Q. How many days before that was that?

A. It was immediately after I showed them the sketches which I had made.

Q. Then you showed Mr. Bole, W. W. Wilson and Knapp and C. E. Wilcox the sketches before you went to the shipper's desk, did you?

A. Before I showed the sketches I had in my pocket.

(Testimony of E. C. Wilson.)

Q. Please answer the question. [154—96]

A. I won't say positively that all those gentlemen were there.

Q. Which gentlemen were there prior to your going to that shipper's desk?

A. I have testified to the best of my knowledge before as to that.

Q. No, you have not. I want you to tell me now clearly who was there prior to the time that you, Bole and Willard went to this shipper's desk and made sketches of this single-piece key device for an under-reamer.

A. I don't believe any sketches were made at that desk.

Q. What did you go to the desk for?

A. I don't remember. We just loitered over there. I don't remember any particular reason for going over there.

Q. To whom did you show any sketch or sketches prior to going to that desk, and when I say "sketch," I am, of course, limiting it to a sketch of this one-piece key device?

A. Mr. Bole was there, Mr. Willard, I believe, and, if my recollection serves me well, W. W. Wilson and possibly Mr. Wilcox and Mr. Knapp. I don't remember whether they were there at the first or not.

Q. Now, let us see again if we can find out what you are willing to testify to. Prior to going to that shipper's desk in company with A. G. Willard and R. E. Bole you said that you showed to some of these men some sketches of this single-piece key device.

(Testimony of E. C. Wilson.)

A. Yes, sir.

Q. Now, then, did you show those sketches to Robert E. Bole prior to going to that desk?

A. I certainly did. He was there.

Q. Who was present at the time you showed the sketches to Robert E. Bole prior to going to the shipper's desk?

A. I will try to tell you again that I believe it was [155—97] W. W. Wilson, Mr. Willard and possibly Mr. Knapp. It is my recollection he was there. Possibly not until later.

Q. Will you state positively that any one of the men that you have named was there?

A. Yes, sir; there was somebody there.

Q. Who was?

A. Mr. Willard and Mr. Knapp—I should say, Mr. Willard, Mr. Bole, and I believe W. W. Wilson. I am fairly positive of that.

Q. That was prior to the three of you—A. G. Willard, Robert E. Bole and yourself—going over to the shipper's desk that afternoon, was it?

A. I know that was the first thing I did—was to call their attention to the change in this key and tee that I was going to make, and I showed them these sketches which I had been working on for several days.

Q. Just prior to doing that, as you say, where were you?

A. Somewhere in the shop. I don't remember where I was.

(Adjourned until 2 o'clock P. M.) [156—98]

(Testimony of E. C. Wilson.)

Wednesday, March 24th, 1915, 2:00 o'clock P. M.

E. C. WILSON, recalled, cross-examination resumed:

(By Mr. LYON.)

Q. Please explain to us, Mr. Wilson, just how you happened to get these men, C. E. Wilcox, W. W. Wilson, A. G. Willard, Robert E. Bole, and W. G. Knapp together in the back of the shop of the Wilson & Willard Manufacturing Company for this conference which you say you called. Tell us what you were about to do, who you took out there first, and so forth.

A. I had made up my mind that I could, by changing the shape and proportions of that tee, overcome the breakages which had occurred when I had previously used it, and I made up my mind that it would be advisable to change back with a slotted-tee type of reamers by reason of that improvement. At that time I thought it well to reconsider the design of the key, which design or two-piece key I had adopted in 1906 or '7, and, if possible, overcome the minor trouble that that key had caused. My mind again reverted to the different designs which I had considered in 1906 or '7. I again made sketches of them and studied their relative merits and tried to determine in my own mind whether they would be a success and an improvement over the double-piece key type. I was not altogether certain in my own mind as to which would be the better type, or as to whether they would be an improvement over the two-piece key, believing that there would be some

(Testimony of E. C. Wilson.)

trouble to remove one of the types which I had designed, namely, the type which I later adopted. I had these sketches in my pocket, as has always been a habit of mine; when I think of an article or a thing I am trying to invent I make a little sketch of it, work it out on paper first. And these sketches I had, and had been studying over for three or four days; and I [157—99] finally concluded to ask the opinion of these different men I had in the shop and whose judgment on those things is fairly good.

Q. Well, proceed and answer the question. I ask you what you did. Tell us how it occurred you got these men together—as you say, called them into conference. Where did you get them, and so forth?

A. They were in the shop of the Wilson & Willard Manufacturing Company.

Q. And where was Mr. A. G. Willard at the time you went out into the shop?

A. He was in the shop, also.

Q. In the shop portion of the shop, or in the office? Did you take him with you for this conference, or where did you get him? I want you to tell us about how you called this conference together.

A. I don't remember whether I called him out of the office or whether I met him out in the shop, or where I got him; but, at any rate, we gathered together around this eight inch under-reamer that was lying on the floor.

Q. Well, where did you find Mr. Bole? Did you call him from the pump department, or from the office, or what?

(Testimony of E. C. Wilson.)

A. He might have been with Mr. Willard, or Knapp, or some of the other men; I don't know. I don't remember how I announced it to get them together, or how it happened; but we were all together around this reamer.

Q. Then, if I am correct, you now testify that you have no recollection as to how you got the men together at that time? Is that it?

Mr. BLAKESLEE.—We object to this as immaterial, as long as the parties were gotten together in the shop and talked to, or came together. [158—100]

The COURT.—I think this is a matter of testing his memory. His memory may not be of very much consequence, but we might see what memory he has on the subject.

A. I can't testify definitely whether they were any of them together when I first commenced to converse about this to get them together or not, or whether they were standing around separately, or how it was.

Q. (By Mr. LYON.) Well, how long had you been talking with Mr. A. G. Willard and Mr. Robert E. Bole about this single-piece key device and sketches before your brother W. W. Wilson joined you at that time?

A. I should say it was only a short time; probably only a few minutes.

Q. Not over two minutes?

A. No; it might have been longer than that.

Q. You had had some conversation, then, with Bole about this before W. W. Wilson came up? Is that it?

(Testimony of E. C. Wilson.)

A. I am not altogether certain that he was not present from the beginning.

Q. Well, what is your recollection?

Mr. BLAKESLEE.—The witness has testified, it seems to me, as to what he knows.

The COURT.—I think, Mr. Blakeslee, he has a right to ask that question. This seems to be a very important circumstance in this case, and it seems to me that we are entitled to all the memory the witness has on the subject, and to test out his memory.

Mr. BLAKESLEE.—We don't object to that, but he has testified, it seems to me, two or three times as to this.

The COURT.—I overrule your objection.

A. It seems to me that I left the office in company with either Mr. Willard, or Mr. Wilson possibly, and went into the shop, or had been in the shop, together, talking with him near the [159—101] office. I don't remember. At any rate, I believe I was in the company of one or the other of those gentlemen—possibly Mr. Bole was with us at the time we walked back to the shop and I announced this intention of mine to change this reamer.

Q. (By Mr. LYON.) Now, please tell us the whole of the conversation that you had at this alleged conference on February 1st, 2d or 3d, 1911, in the presence of Robert E. Bole?

A. I would not be able to tell you the whole conversation. I might tell you the substance of it.

Q. Well, tell us all that you remember of it, giving the words of the conversation as nearly as you

(Testimony of E. C. Wilson.)

can and now recollect them?

A. The idea of changing this under-reamer over had been on my mind several days, and I just commenced to discuss this change which I had in mind with these boys, and told them that I had determined from my drawings and sketches which I had made, laying the size of this tee off the full size, that I could overcome the faults and shortcomings of the old-style slotted tee, and that this order for the twelve and a half inch tee received from the Pacific Iron Works at McKittrick had again caused me to reconsider the merits of that style of under-reamer. I was convinced from my observations that the slotted tee was the better type of reamer, and that it could be strengthened and made to overcome the other faults. "Now," I said, "with that point settled in my mind I have determined to change the style of key, if possible, and make another key which would be an improvement over the double-piece key; but I am not certain as to whether that is possible or not. I have made sketches and have been studying on the thing for several days, and I have different designs and ideas here which I would like to have your opinion on." I showed them these little sketches which I had in my pocket. I am not sure whether—I imagine they were on single pieces of paper. At any rate, [160—102] I showed them those sketches at the time and asked their opinion. When I told them that it would be necessary to have two screw plugs to hold it in place—one of which plugs would remain permanently in the reamer, but the other

(Testimony of E. C. Wilson.)

plug would have to be removed each time the key was removed. Another style of key of the one-piece type would also require the use of a plug to hold it in place. And then I showed them another key which I had which would overcome the use of the plug altogether; but I said, "The trouble with this key is I am afraid it will cause trouble to remove. I can see very well how it will be placed in the reamer, but it will be hard to take out; I am afraid we will have trouble to remove it, and possibly that will prevent its being adopted or used by the oil men." And at that moment, the boys all looking at this sketch, and I holding it in my hand, Mr. Bole said, "Why, pry it out." I said, "Yes, pry it out, of course, but how will we pry it out so that it will be convenient enough that it will be adopted?" And he said, "I can design a tool which will pry it out." "Well," I said, "I think I can design a tool which would pry it out, but I think even then it will give us considerable trouble to remove."

Q. That is all of the conversation you remember, is it?

A. That was the sum of the conversation; yes, sir. I might add that I had the opinion of the men at that time that a key which dispensed with the use of the plug would be the better type of key if we could remove it with sufficient ease to be adopted; and I don't know, but it seems to me one of the boys said, "Well, it is worth trying, anyway." And I said, "I think it is." And I think that is about the sum and substance of the conversation.

(Testimony of E. C. Wilson.)

Q. Did you, in that conversation, at the end of it, tell them that you were going to try it out immediately?

A. I probably said, "I believe I will give it a trial."

Q. You won't be positive as to that, then? [161—103]

A. I know, at any rate, the order was made up for the reamer very shortly afterwards.

Q. Now, then, in Interference 37,126 you were a witness on your own behalf, and testified as follows: "I had one key which I knew how to make and put in place, and which would overcome the use of the plug, which was one of the chief objections that I was aiming to avoid in designing this key, but I did not know how to take the key out. When I showed them that key and called attention to the fact that it would hold itself in place by means of the tension of the spring, and could not work out at either end of the key slot, I said, 'The trouble with this key is I can't take it out. I don't know how to take it out.' And at that juncture, R. E. Bole said, 'Simply pry it out. Pry it out at one end.' I said, 'That is all very well'—we would have to pry it out, 'but I do not think we have room enough to pry it out.' He said, 'Yes, you can; you can pry it up at one end.' I said, 'Possibly so, but some tool would have to be devised to do it.' He said, 'I can devise a tool that will pry it out.' " You gave that testimony, did you?

Mr. BLAKESLEE.—We object to that question as indefinite and incomplete. Counsel has referred

(Testimony of E. C. Wilson.)

to some interference, and given what purports to be the number of it. Now, it seems to me he should tell this witness what that proceeding was. Counsel is apparently dodging the question that there has been an interference of some sort. We would like to have him state what the interference was.

The COURT.—You have already told that there was an interference. Was this testimony he gave at some other time?

Q. (By Mr. LYON.) The testimony I refer to, Mr. Wilson, is your answer to question 62, asked you on direct examination, at about two o'clock or right after the opening of the session on the afternoon of May 28th, 1914; and I will show you the transcript [162—104] of such evidence if you wish to look at it.

Mr. BLAKESLEE.—I think it is fair to state whether or not it is the Interference.

The COURT.—The question is whether or not he testified that way at any time.

A. Yes, sir; I so testified.

Q. (By Mr. LYON.) Was that testimony true, to the best of your knowledge at that time?

A. It does not seem to convey altogether the right idea. I probably could have used language that would have conveyed my idea better—the thought I had in mind.

Q. Now, you say that when you got this order for the twelve and a half inch slotted tee from Mr. Williams it brought your mind back to the old two-piece key type of under-reamer. When did you com-

(Testimony of E. C. Wilson.)

mence to lay out the drawings of an enlarged tee?

A. On the day I received that order.

Q. On the 26th day of February, 1911?

A. January.

Q. January, 1911. And you consulted with and worked with your brother, W. W. Wilson, on that day and on the following day, in connection with that enlarged slotted tee drawing, did you?

A. Yes, sir.

The COURT.—What date was that?

Mr. LYON—January 26th and January 27th, 1911—about a week before this alleged conference.

Q. And you say you had had the idea of this one-piece key ever since 1896 or '97, when you first used the two-piece key? Is that correct? A. Yes, sir.

Mr. BLAKESLEE.—Objected to as misleading—1896 and 1897.

Mr. LYON.—1906. The witness understands.

Q. You said nothing to your brother W. W. Wilson on either [163—105] January 26th or 27th, 1911, when you and he were working on this drawing of the enlarged slotted key for this reamer, did you?

A. I won't say that I did not.

Q. Will you say that you did?

A. Why, I probably did as late as the next day after January 26th, which would be the 27th. I have stated that I determined in my mind that day, on the 26th, that I could overcome the tee trouble.

Q. Will you state positively that you discussed this single-piece key with your brother on either January 26th or 27th, 1911, and when I say "your

(Testimony of E. C. Wilson.)

brother'' I mean your brother W. W. Wilson?

A. I won't state positively that I did, no. I probably did.

Q. This key that you speak of, so far as the key is concerned, is an ordinary key of the type known as a gib, or gibkey, used in various kinds of machines with which you have been familiar since as early as 1900 or 1901? Is that correct?

Mr. BLAKESLEE.—Objected to as calling for a conclusion and not a statement of fact; not a description but a mere conclusion.

The COURT.—I think so. Objection sustained.

Q. (By Mr. LYON.) How long, Mr. Wilson, prior to January 26, 1911, had you personally been familiar with the use, in any kind of a machine, of a gib or key like that which is now used in Defendants' Exhibit 1, which I now show you?

A. I don't believe I ever saw a key of that design prior to that time.

Q. In what respect does this key differ from the others that you had seen prior to that time?

Mr. BLAKESLEE.—Objected to as indefinite. It does not call for a definite comparison with any prior device. Merely an indefinite suggestion that there may have been some prior thing, without defining it.

The COURT.—I will overrule the objection.
[164—106]

A. I had used keys in the manufacture of the patented spear which I invented in 1901 or '2, I believe; and I had used keys in the manufacture of this un-

(Testimony of E. C. Wilson.)

der-reamer which was first made in 1904.

Q. (By Mr. LYON.) And those spears that you refer to were casing-spears for use in oil wells?

A. Yes, sir.

Q. And the object of such key was an assembling device to permit the operative parts of the tool to be taken from the body and mounted on the body of the tool?

Mr. BLAKESLEE.—Objected to as immaterial, inasmuch as the keys were not the same as those concerned here.

The COURT.—I think that is going too far, Mr. Lyon. Can't you ask him a leading question concerning these matters to get at what you want without going into the history of all this key business?

Mr. LYON.—The only thing I want to show the Court, if your Honor please, is this—as I will before I get through—that substantially the same key had been used in tools with which he is familiar, and to show—

The COURT.—Well, go at it directly.

Q. (By Mr. LYON.) The key in the Wilson casing-spear that you refer to differed from this key of Defendants' Exhibit 1 simply in the inclined top surfaces, to which I now point, the top of the key referred to in the casing-spear being spread instead of doubled at these points. Is that correct?

A. No.

Mr. BLAKESLEE.—Objected to as indefinite.

A. Your statement is not correct.

Q. (By Mr. LYON.) Then explain that key of the

(Testimony of E. C. Wilson.)

Wilson casing-spear.

Q. (By the COURT.) (Interrupting.) In what respect does this key [165—107] differ from any prior key you had ever seen?

A. The keys that are commonly known as a gib-key, instead of having a shoulder, have a recess, or angular recess, which is the opposite from this shoulder, and it drops down and drops down on to a rod, as a rule, and prevents it moving in or out of a rod or bar; and it is generally held in there—

Q. (By the COURT.) Have they got that top corner angled?

A. No; as a rule those are always flat.

Q. Straight? A. Straight.

Q. (By Mr. LYON.) You mean that in the Wilson casing-spear you used the recess gib that you have referred to?

A. Yes.

Mr. BLAKESLEE.—We object to that as incompetent, irrelevant and immaterial, for the reason that this patent, and each of its claims, is for a combination including the key, and is not for the key itself. The cutters of the reamer were old.

The COURT.—There is no question before the Court now. Proceed, Mr. Lyon.

Q. (By Mr. LYON.) What difficulties in removing the dips, or in removing the dips and spring-actuated rod and spring did you encounter in the use of the Wilson under-reamer of the block and screw type?

A. I don't know that we experienced any particu-

(Testimony of E. C. Wilson.)

lar difficulties in removing them. It was sometimes a little hard to pry the block up against the tension springs to insert the screws; but it requires about as much work to put this key in as it did the block and screw.

Q. In Interference Number 37,126, question 41, your answer to that question was as follows. I will read the question first: "My question asked when you first evolved or conceived of such a one-piece key modification. What have you to say as to that?" [166—108]

A. I think it was in January, 1911, that we received a telegraphic order—I believe it was a telegraphic order—from Mr. Williams of the Pacific Iron Works of McKittrick for a 12½-inch slotted tee for Wilson under-reamer. At that time we had been having considerable trouble with the screws in connection with our block-and-screw type, as we called it, and which I have previously described. The screws would stick in the reamer body and give us considerable difficulty to remove them, sometimes necessitating the operator sending the reamer to the shop to have them drilled out, and when we had been getting these reports my mind again reverted to the key type of under-reamer. I had been thinking about it for some time and had been making inquiries of different parties as to their opinion of the Wilson under-reamer of the block-and-screw type. And when this order came in for the slotted-tee type of under-reamer it impressed me very much as surprising that one of those reamers

(Testimony of E. C. Wilson.)

was still in use. I had supposed they were all out of use. And that afternoon I remember of studying the thing over and I concluded to take the matter up with Mr. Williams, who had ordered this tee, and learn his personal opinion as to the relative merits of our block and screw type of under-reamer as compared with the slotted-tee type with the double key. I wrote him a letter that day on which we received this order. I think that was January 25, 1911. I asked him—

A. As I stated, I wrote immediately a letter on that date asking his opinion on those points. His reply convinced me that I had not worked out the full possibilities of the slotted-tee type of under-reamer, and I set about at once to determine how strong that tee could be made, and, if possible, to overcome the difficulty had with the double-key type. The double-key type of under-reamer had not been thoroughly satisfactory for the reason that the keys, being on a taper, had a tendency to drive the [167—109] upper one outwardly from the plug by which it was retained in position, damaging the threads and making it difficult to remove the plugs.” You gave that testimony, did you? A. Yes, sir.

Q. And the statements therein which I have read were true?

A. With one exception, I think. I believe that testimony reads that after receiving that letter I commenced the work of making that on that type. It was immediately after receiving the order of January 27th.

(Testimony of E. C. Wilson.)

Q. The statements, however, as far as the difficulties of removing the block and screw type and the double-key type—and when I say “removing” I mean dismantling—contained in that answer, were true, were they?

A. Yes, so far as removing is concerned. But you spoke of assembling, a while ago.

Q. Now, isn't it a fact that the double-key type of under-reamer, when in use in under-reaming—in other words, when the device was assembled—was found thoroughly satisfactory in use and there was no difficulty with the double key while in the act of under-reaming?

A. The double key itself worked all right; when it was in a hold it performed its service all right, when in active use.

Q. And the only difficulty with the double-key type, so far as the double key is concerned, was the wedging out of the top part of the tee, as stated in the answer I have read you, and the necessity, often, to drill up the screw key and dismantle the reamer; is that correct?

A. Not altogether. I think the trouble is inclined to be the carelessness of the drillers. They didn't keep it properly lubricated. [168—110]

Q. They had trouble with that key, however?

A. Yes, sir.

Q. And the reason you wanted to adopt a single-piece key was because it was more readily removed, and the bits more readily taken off? Is that correct?

(Testimony of E. C. Wilson.)

A. I thought it would give better service; yes.

Q. You have referred to Mr. A. G. Willard in your testimony. Mr. A. G. Willard owned substantially one-half of the stock in the Wilson & Willard Manufacturing Company, and you owned substantially the other half of the stock, and all of the stock was held between you and A. G. Willard except two or three shares that were in the name of Mr. Willard's wife, at all times from the incorporation of the Wilson & Willard Manufacturing Company up to 1913? Is that correct?

Mr. BLAKESLEE.—Object to that as immaterial to prove any of the issues, or disprove anything.

The COURT.—It is only for the purpose of showing his interest. I don't know whether it is appropriate to show Mrs. Willard's interest in this thing or not.

Mr. BLAKESLEE.—That is what we object to.

The COURT.—Sustained.

Mr. LYON.—I want to show the connection of these parties and their interrelation, so that we can judge of the whole of this alleged conversation.

The COURT.—I will let it stay in until Mr. Willard comes on the stand. I presume he will testify.

A. Yes, sir; that is correct, up to the time I bought his interest. I think that was 1913.

Q. You were asked, in your examination in said interference, the following question: "Q. 500. Then I will again ask you, if it is in your testimony that prior to the receipt on January 30, 1911, of Wilson Exhibit Pacific Iron Works Letter of January 28,

(Testimony of E. C. Wilson.)

[169—111] 1911, you had ever discussed with either your brother, W. W. Wilson, Charles E. Wilcox, Arthur G. Willard or Robert E. Bole, the use of the single-piece key in the Wilson reamer, for the purpose of mounting the tee bar or spring-actuated rod and spring in the Wilson under-reamer.

A. I think I discussed the advisability of making the change in my Wilson under-reamer with W. W. Wilson on the day that I received the order for the 12½-inch tee, which was January 26, 1911. I believe I had no discussion with Mr. Willard or Mr. Bole or Mr. Wilcox about that key, or about a single-piece key, immediately prior to the receipt of this letter. It is possible that I had referred to my suspicion that a single-piece key could be made that would be an improvement on the double-key type, but whether or not I discussed it prior to this date referred to, with these several gentlemen, I am not prepared to say. I don't remember." Did you give that testimony? A. Prior to January 30th?

Q. No. Just read the question, and let the witness look at the testimony.

Mr. BLAKESLEE.—Which are we to believe? Counsel says he so testified and then asks him if he did. Counsel admitted he so testified.

(Record shown to witness.)

A. Yes, sir. I so testified.

Q. (By Mr. LYON.) Again referring to your testimony in said interference, was the following question asked and answer given by you: "And according to your best recollection you did not discuss

(Testimony of E. C. Wilson.)

with W. W. Wilson at any time prior to this conference which we have identified, such one-piece key device of the Wilson under-reamer?

A. I do not remember definitely—I don't know that I remember at all having discussed with him at all prior to that time." Did you so testify? [170—112]

A. Yes, sir. And that is uncertain in my mind still. It was my opinion that I did, but I can't swear definitely that I did.

Q. Well, did you give the testimony that I read?

A. Yes; I testified that way.

Q. I show you a copy of letters patent of the United States numbered 827,595, patented July 31, 1906, to Elihu C. Wilson, of Bakersfield, California, for under-reamer, and ask you if you are the Elihu C. Wilson named therein? A. I am.

Q. And that is a copy of the patent under which you manufacture these Wilson under-reamers?

Mr. BLAKESLEE.—Objected to as calling for a conclusion. The witness can state what he manufactures, but whether or not it embodies all of that invention calls for a conclusion.

Mr. LYON.—I ask him if that is the patent that he claims to be manufacturing under.

Mr. BLAKESLEE.—The same thing.

The COURT.—I understand you to ask him if he is operating under that patent.

Mr. LYON.—That is it.

Mr. BLAKESLEE.—That calls for a conclusion.

The COURT.—The objection is overruled.

(Testimony of E. C. Wilson.)

A. Yes, sir.

Q. (By Mr. LYON.) You are still the owner and holder of said letters patent? A. Yes, sir.

Q. And the Wilson & Willard Manufacturing Company have been at all times manufacturing under this letters patent, have you?

Mr. BLAKESLEE.—Same objection.

A. Yes, sir.

Mr. LYON.—We offer the Wilson patent referred to in evidence. [171—113] If the Court will permit, I will substitute another copy of it. This is bound in here.

Mr. BLAKESLEE.—Have you another copy?

Mr. LYON.—Not in the courtroom at the present minute.

Mr. BLAKESLEE.—That may be left in the meantime?

Mr. LYON.—Yes.

Mr. BLAKESLEE.—We have no objection. In fact, we invite its offer.

The COURT.—Well, you gentlemen can agree upon it and have it filed.

The CLERK.—That will be Complainant's Exhibit "B."

Mr. LYON.—That is all.

Redirect Examination.

(By Mr. BLAKESLEE.)

Q. Please state what was the history of reamer 120 between the time when it was first put together or assembled with the single-piece key, as you have testified, the latter part of February, 1911, and

(Testimony of E. C. Wilson.)

April 22d, 1911, at which time you have testified it was completed.

A. Some little time after the reamer was finished, so far as the machine work was concerned, it was sent to the blacksmith-shop and was tampered, hardened. The reamer was in the blacksmith shop lying on two wooden horses, and we quite frequently displayed it to customers and other men who were interested in oil-well tools and who came to our shop. The reamer was taken apart and reassembled many times while it was there.

Q. And during this period of time, or interim, where was this reamer?

A. It was in our machine shop for a while, and then in the blacksmith shop.

Q. Was it sold prior to April 22, 1911? [172—114] A. No, sir.

Q. Now, you have testified with respect to the conference on or about February 3, 1911, and your being near a shaper in the machine shop,—at one time, and near the shipping, in the machine-shop—at another time, during the general period covered by your testimony as to that conference. How many times during that conference was the question of prying the key out of the reamer discussed?

Mr. LYON.—We object to that as leading and suggestive, assuming facts not testified to by the witness.

The COURT.—Let him tell what was said.

A. I contended that there would be difficulty in prying the key out of the reamer, and that was the

(Testimony of E. C. Wilson.)

substance of the discussion. The key—as to its design, we agreed; but there was a difference of opinion among us as to whether or not the key could be removed with sufficient convenience to cause its adoption. I said, “I don’t know whether we can pry the key out with sufficient ease.”

The COURT.—Now, Mr. Blakeslee, that has been stated two or three times. What is your point?

Mr. BLAKESLEE.—My question, as to which the answer is not responsive, was as to how many times this discussion took place—whether it was repeated?

Q. (By the COURT.) Can’t you state that, Mr. Wilson ?

A. Oh, that statement was probably repeated by me several times, because I still contended that there would probably be some trouble to remove the key. I said, “It is all right, the key is good, if we can remove it sufficiently conveniently for the men to find it satisfactory.”

Q. (By Mr. BLAKESLEE.) And as to these several times of such discussion as to prying the key out, when did such several times occur, or when were such several times, with respect to the portion of the conference at which you were at the shipping desk, [173—115] and the portion of the time at which you were near the shaper?

Mr. LYON.—We object, on the ground that it is leading and suggestive, and assuming facts not testified to by the witness. The witness says that possibly he may have made these remarks more than once, but he has not positively stated that he did.

(Testimony of E. C. Wilson.)

The COURT.—Objection sustained.

Q. (By Mr. BLAKESLEE.)—Please state when and where, during this conference, any such talk of prying out the key of the reamer occurred?

A. It occurred when I first presented the sketches to the men, at the time we were standing near the reamer 120 as it lay on the floor by this shaper, and probably was repeated several times while there. I don't know how many times it was repeated. Possibly while we were near the desk, or probably while we were walking away from the place, because that was the chief point that I had in mind and the one I wished to consult with these men about.

Q. What have you to say with respect to the comparative cost of the single-piece reamer key and the two-piece reamer key with its screw plug?

Mr. LYON.—That is objected to as irrelevant and immaterial; not cross-examination.

The COURT.—I can't see the materiality of it.

Mr. BLAKESLEE.—Counsel has tried to make it appear that the only possible reason that this single-piece key was adopted was because they had trouble. This is directly responsive to their cross-examination. I am trying to show the relative cost. That enters largely into the question of the adoption of new devices. They tried to make it appear it was only because of certain trouble. I want to find out if there was something else.

The COURT.—Objection overruled. [174—116]

A. The one-piece key is much cheaper to make.

Q. (By Mr. BLAKESLEE.)—And how, also,

(Testimony of E. C. Wilson.)

comparatively, as between the single-piece key and the block-and-screw type?

Mr. LYON.—Objected to as irrelevant and immaterial, not cross-examination.

The COURT.—Overruled.

A. The key is cheaper than the block and the screw type. That is somewhat offset, though, by the additional expense of this tee. It costs more than the old style tee did.

Q. (By Mr. BLAKESLEE.) And did these considerations enter, to any extent, into your decision to adopt the one-piece key?

Mr. LYON.—Objected to as leading and suggestive, and not cross-examination.

The COURT.—I will overrule the objection.

A. It did, when I first adopted the two-piece key type away back in 1906 or '7. That was one of the chief reasons I had in mind for considering a one-piece key at that time.

Q. (By the COURT.) When was that?

A. That was in 1906 or '7.

Mr. BLAKESLEE.—That is all.

Recross-examination.

(By Mr. LYON.)

Q. Now, Mr. Wilson, in this alleged conference of February 1, 2 or 3, 1911, when you say that possibly you made the remark several times during such conference—once near this under-reamer and possibly several times there, and over at the shipping desk—I suppose Mr. Bole each time made this remark, "Why, pry it out," then, did he?

(Testimony of E. C. Wilson.)

A. I don't remember whether he made the remark each time or not. [175—117]

Redirect Examination.

(By Mr. BLAKESLEE.)

Q. Did Mr. Bole ever show you any tool for prying this reamer key out?

Mr. LYON.—We object to that on the ground it is not proper redirect examination, and as leading.

Mr. BLAKESLEE.—I think possibly it is not redirect. I ask, in that case, if I may recall the witness to ask that one question. It is material.

The COURT.—Objection overruled. Go ahead and answer it. A. No, sir.

Mr. BLAKESLEE.—That is all.

Recross-examination.

(By Mr. LYON.)

Q. You testified in the Interference suit that you saw Mr. Bole busy at the bench, you presumed working on his device, but that he had never shown it to you? Is that correct?

Mr. BLAKESLEE.—Objected to as placing an arbitrary interpretation upon the testimony without quoting it, if there be such.

The COURT.—Well, he is entitled to see the testimony, Mr. Lyon.

Mr. LYON.—If he requires it, I will show it to him, before he gets through.

The COURT.—That objection being made on that ground, it is sustained.

Q. (By Mr. LYON.) Changing the form of the question, Did you at any time during the work on

(Testimony of E. C. Wilson.)

the first reamer embodying the one-piece key device, at the Wilson & Willard Manufacturing Company's shop, see Mr. Bole working on anything at the bench pertaining to such key-removing device? [176—118]

Mr. BLAKESLEE.—Objected to as calling for a conclusion.

The COURT.—Overruled

A. I cannot state that he was working on a key device. I realized that he was busy about something, and it didn't make much of an impression on me at the time.

Q. (By Mr. LYON.) You didn't pay much attention to what he was working on at that time?

A. I really paid no attention to it.

Q. You couldn't say whether it was the key-removing device or one of the single-piece keys, could you?

A. Not only by hearsay. I was told afterwards that that was what he was doing.

Mr. LYON.—That is all.

Redirect Examination.

(By Mr. BLAKESLEE.)

Q. You were told afterwards he was doing what?

A. That he had been working on a lever or some sort of a tool to pry that key out.

Q. Were you told afterwards that he had been working on a single-piece key?

A. No; only on a lever for prying out the single-piece key. [177—119]

[Testimony of William G. Knapp, for Defendants.]

WILLIAM G. KNAPP, called and sworn on behalf of defendants, being first duly sworn, testified as follows:

Direct Examination.

(By Mr. BLAKESLEE.)

Q. Please state your full name, age, residence and occupation.

A. William G. Knapp; age, thirty-seven; occupation, machinist; residence, 830 North Marguerita Avenue, Alhambra.

Q. Were you ever employed by the Wilson & Willard Manufacturing Company, the defendant in this case? A. Yes, sir.

Q. During what period of time?

A. From the year 1908 to 1914 and beginning of 1915.

Q. What was the nature of such employment?

A. At first I worked as a machinist and later as foreman of the shop.

Q. You are not connected with them at the present time, are you? A. No, sir.

Q. What sort of articles or devices were manufactured there during your superintendence?

A. Wilson under-reamers, Wilson casing spears, Wilson casing elevators, Bole pumps, Willard circulating heads.

Q. I will ask you to please look at "Defendant's Exhibit No. 1," and ask you whether you ever have seen such a device before. A. Yes, sir.

(Testimony of William G. Knapp.)

Q. What is it?

Mr. LYON.—Objected to as immaterial.

The COURT.—I don't see that it is necessary, Mr. Blakeslee. I can't see why you should go through those merely formal matters with this witness.

Mr. BLAKESLEE.—It is simply to show that he manufactured them. [178—120]

The COURT.—I suppose that will be admitted. He worked in the shop when these things were manufactured.

Q. (By Mr. BLAKESLEE.) When did you first see at that shop an under-reamer such as this exhibit, with the single-piece key device in it?

A. A complete reamer?

Q. I mean a reamer with the parts assembled together with such a single-piece key.

A. I think it was in the latter part of February or first of March.

Q. Of what year? A. 1911.

Q. (By the COURT.) Is that this reamer 120?

Mr. BLAKESLEE.—Yes, sir. That was reamer No. 120? A. Yes, sir.

Q. Can you give the names of any persons who performed work on that reamer? A. Yes, sir.

Q. Please do so.

A. Mr. Wills, Mr. Rydgren, Mr. Bird, Mr. Houriet.

Q. What sort of work or what nature of work did each of these parties do on that reamer?

A. Mr. Wills did fitting work, I believe, and also Mr. Houriet; and Mr. Rydgren was the blacksmith

(Testimony of William G. Knapp.)

and forged the materials, and Mr. Bird was his helper.

Q. How was it that reamer came to be made over in that shop to include such single-piece key?

A. It was made over under instructions or caused by the instructions from Mr. E. C. Wilson to myself.

Q. In what form did you receive those instructions?

A. My first instructions were verbal, to the best of my knowledge. [179—121]

Q. What was the nature of those verbal instructions?

A. Mr. Wilson took me over to the side of the shop near a post where this reamer 120 was standing, and explained to me that he was going to try a 1-piece key in this reamer. And at that time he took a pencil and drew on the palm of his hand a sketch of this key.

Q. Can you at this time produce or have you at any time heretofore produced or reproduced such a design as he drew upon his hand with a pencil at this time? A. I have.

Q. Have you such reproduction of that design before you? A. Yes, sir.

Q. When did you make this outline sketch?

A. According to the notation in the corner, June 23, 1914.

Q. How did you come to make it?

A. I believe it was made at the request of yourself.

Q. Under what circumstances and where?

(Testimony of William G. Knapp.)

A. It was during an interference suit. I believe it was at your office that the proceedings were held.

Q. Between what parties?

Mr. LYON.—Objected to as irrelevant, immaterial and incompetent.

The COURT.—That is not necessary, that I see, if he made it at that time. It does not illustrate his testimony.

Q. (By Mr. BLAKESLEE.) What does that sketch show?

Mr. LYON.—Objected to as not the best evidence. The sketch is the best evidence.

The COURT.—He has testified that it was for the purpose of illustrating what Mr. Wilson drew on the palm of his hand. Is there anything different from that that you want to get?

Mr. BLAKESLEE.—I just wish him to repeat that it was made for that purpose at that time. [180—122]

The COURT.—There is no use having it repeated. He has already stated it.

Q. (By Mr. BLAKESLEE.) In what form did you receive any further instructions as to the making over of this reamer 120?

A. Later I received a shop order in the regular way from the office to proceed with the making over of this reamer.

Q. In what form was that shop order?

A. Typewritten form.

Q. Do you know where that shop order is at the present time? A. No, sir.

(Testimony of William G. Knapp.)

Q. Please look among the exhibits and see if you can find it.

Mr. LYON.—Oh, hand it to him.

Q. (By Mr. BLAKESLEE.) Look among the papers and see if you can find it.

A. Yes, sir. Order No. 6904.

Q. When did you first see this order?

A. February 3, 1911.

Q. And from whom did you directly receive it?

A. I cannot recall whether Mr. Wilson handed it to me personally or whether it was laid on my desk. As a rule they were simply laid on my desk.

Q. To what Mr. Wilson are you referring and have you referred heretofore?

A. Mr. E. C. Wilson.

Q. A defendant in this case? A. Yes, sir.

Q. What was his connection with that business at that time?

A. President of the company—of the Wilson & Willard Manufacturing Company.

Q. Referring to these several sheets that you have in your hand and beginning with the lowermost one and treating them successively, please tell me anything you know about them. [181—123]

A. The first sheet bearing the date February 3, 1911, order No. 6904—that is all wrong.

Q. (By The COURT.) Don't that show for itself what it is?

Mr. BLAKESLEE.—I think not. There are such things as initials on there which we think are his and various other identifying data, shop number.

(Testimony of William G. Knapp.)

A. The first is a material card. In other words, a slip which we used at the shop for turning in the different kinds of material which were used in the manufacture of different articles. There appears the date February 23, 1911, and is charged to order No. 6904, and calls for one piece of nickel steel weighing three pounds, which was used in the manufacture of a key and turned in by Fred Rydgren, the blacksmith, at that time.

Sheet No. 2 is order No. 6904 bearing the date of February 3, 1911, charging to the reamer account the time and material consumed in changing over 8-inch reamer No. 120. This order was later turned in to the office on March 22, 1911, by myself.

Sheet No. 3 is the shop order bearing the date February 18, 1911, order No. 7056, dictated by myself, charging to the reamer account labor and material to forge and machine one special 8-inch slotted tee and coil three special springs for same, to be used in the rebuilding of reamer No. 120. This order was turned in March 8, 1911, by myself.

The third slip is a sketch of the tee bar which was made for this reamer No. 120, and handed to me by Mr. Wilson and drawn by himself. It is all right to group these, isn't it?

Q. (By Mr. BLAKESLEE.) This is for the purpose of description—

The COURT.—Don't they show for themselves what they are?

Mr. BLAKESLEE.—Excepting his initials.

The COURT.—I think that is all that is necessary.

(Testimony of William G. Knapp.)

Have you initialed any of them?

A. Yes, sir; I think all of them. [182—124]

The COURT.—Has this been filed as an exhibit?

Mr. BLAKESLEE.—Not yet—simply for identification, to be offered after being fully identified.

Q. What does the placing of your initials on those slips signify?

A. It signifies that I charged to the reamer account or order No. 6904 for the labor performed on that order.

The COURT.—This is the document that I examined, isn't it?

Mr. BLAKESLEE.—Yes, sir; that is the document, and this is the sketch there.

Q. And when did you first see these slips, or any of them?

A. The first time I saw any of these slips was February 23, 1911.

Q. You are now speaking of the small slips attached to the large ones? A. Yes, sir.

Q. I now show you another batch of slips which bear, I think all of them, order No. 7056. Do you know whether there is any relation between that batch of slips and the first batch of slips just handed you?

The COURT.—Is that marked in any way?

Mr. BLAKESLEE.—Not yet. Those I think have not been considered yet.

A. Yes, sir; these slips are undoubtedly slips turned in by workmen for making the 8-inch tee bar.

Q. (By the COURT.) You say "undoubtedly." What do you know about it?

(Testimony of William G. Knapp.)

A. They are, so far as I know.

Q. Do you know whether they are or not? Are your initials on any of them?

A. Yes, sir; all of them.

Q. (By Mr. BLAKESLEE.) What does that signify? [183—125]

A. That I O. K.'d the cards and turned them in to the office as being correct.

Q. And when did you O. K. them with respect to what the slips show?

A. On the day following the date placed on the top of the card, namely, February 23, I believe, is the first.

Q. And who are the parties whose several names appear on these slips?

A. Workmen in the plant.

Q. And does the appearance of their names in those slips signify anything with respect to the work on this reamer 120?

Mr. LYON.—Objected to as incompetent.

The COURT.—The objection is overruled.

Yes, sir.

Q. (By Mr. BLAKESLEE.) What does it signify?

A. It signifies that the work was performed according to my instructions.

Q. By those men? A. Yes, sir.

Q. I now hand you another group of slips bearing I think, all of them, order No. 6904, and ask you if these slips also relate to the matter of making over reamer No. 120?

(Testimony of William G. Knapp.)

The COURT.—Is there any dispute about reamer 120 having been made in the shop?

Mr. LYON.—None about its being made in the shop; no.

Mr. BLAKESLEE.—We are trying to show that this reamer was the first of these reamers and was made by and on behalf of Mr. Wilson—

The COURT.—I don't see how these slips throw any light on it.

Mr. BLAKESLEE.—Because we will contend that they were slips which were issued and which were marked and filled in by the workmen under Mr. Knapp, who received his instructions from Mr. Wilson and nobody else, and not from Mr. Bole.

The COURT.—Yes; I understand that. They were done through [184—126] Mr. Wilson having this thing made over. I don't understand that Mr. Bole claims that he was in charge of that shop or in charge of making these reamers. Am I right about that?

Mr. LYON.—He had no authority except with Mr. Wilson's consent to do anything on any under-reamer. And while we do not admit that he did not have anything whatever to do with the making of this thing over, it must have been by Mr. Wilson's consent and under Mr. Wilson's authority. He could not touch one of these reamers without it.

Mr. BLAKESLEE.—And we furthermore wish to show diligence with respect to making this reamer over immediately after its conception by Mr. Wilson—

The COURT.—All right.

(Testimony of William G. Knapp.)

Q. (By Mr. BLAKESLEE.) These slips passed through the shop of the Wilson & Willard Manufacturing Company under your superintendence in connection with making over reamer 120?

A. Yes, sir.

Mr. LYON.—Put the slips in evidence. We are not questioning the slips.

The COURT.—I don't see why you don't put them in evidence. He has identified them.

Mr. BLAKESLEE.—We want to tie them up with that particular work.

Q. (By the COURT.) Do these slips relate to that reamer 120? A. Yes, sir.

Mr. BLAKESLEE.—We offer in evidence the slips bearing the order No. 6904, as "Defendant's Exhibit Order Papers and Sketches Pertinent to the Making over of Reamer 120," and ask that the same be received and marked, and also offer with it the shop envelope in which these slips have been retained.

(Marked Defendant's Exhibits 6 and 7.) [185—127]

Mr. BLAKESLEE.—We also offer in evidence the group of slips marked Order No. 7056, as "Defendant's Exhibit Shop Order Slips Pertinent to the Making Over of Reamer 120," with the shop envelope of the same, and ask that the same be received.

(Marked Exhibit 8.)

Mr. BLAKESLEE.—We also offer in evidence the outline sketch on yellow paper identified by the witness, as "Defendant's Exhibit Knapp single-piece

(Testimony of William G. Knapp.)

Key Reproduction Sketch."

Q. (By Mr. BLAKESLEE.) To your knowledge did Mr. Robert E. Bole, the complainant in this case, have anything to do with the execution of order No. 6904 or the associated order No. 7056 for making over reamer 120?

Mr. LYON.—Objected to as leading and incompetent, calling for a conclusion of the witness, and not for a statement of facts.

The COURT.—I think, Mr. Blakeslee, the proper way is to ask the witness if he saw Mr. Bole have anything to do with it.

Mr. BLAKESLEE.—He might have heard him have something to do with it.

The COURT.—Ask what he said or did; what he saw him do or heard him say about it.

Mr. BLAKESLEE.—The question is withdrawn.

Q. To your knowledge did Robert E. Bole, the complainant in this case, give any instructions or assistance by act or word of mouth in connection with making over reamer 120 to include the single-piece key?

Mr. LYON.—The same objection.

The COURT.—Overruled.

A. Not to my knowledge.

Q. (By Mr. BLAKESLEE.) Do you know of any other reamer having been made or fitted with such a single-piece key prior to the [186—128] transformation of reamer 120? A. No, sir.

Q. Did Mr. Robert E. Bole at any time submit to you a sketch or drawing or outline of such a single-

(Testimony of William G. Knapp.)

piece key prior to the completion of this making over of reamer 120?

Mr. LYON.—Objected to as leading and as incompetent.

The COURT.—The objection is overruled.

A. No, sir.

Q. (By Mr. BLAKESLEE.) Did you receive instructions as to the making over of this reamer 120 from anybody other than the defendant, E. C. Wilson? A. No, sir.

Mr. LYON.—Objected to as leading and calling for a conclusion of the witness.

The COURT.—It looks to me like it is evidence proving a negative. It is not very material. It don't have much weight. It is in now, let it go.

Q. (By Mr. BLAKESLEE.) Do you know what was done with this reamer 120 after it had been made over? A. Yes, sir.

Q. What was done with it?

A. It was finally sold to the Norbeck & Nicholson Company, South Dakota.

Q. Can you state when it was shipped to them, if it was shipped?

A. I cannot state exactly. It was shipped, but I cannot give the exact date.

Q. Can you give the month?

A. I think it was in June.

Q. What year? A. 1911.

Q. Please state briefly what was done in making over this [187—129] reamer 120, including the fitting of it with a single-piece key.

A. The under-reamer was disassembled and taken

(Testimony of William G. Knapp.)

to the blacksmith's shop and annealed. In other words, to make it soft so we could machine it. The mouth of the reamer was milled out to standard size. The hole in the reamer body was enlarged to a larger size to accomodate the new-style key and was fitted with a bottom bolt or safety bolt.

Q. What was the purpose of that safety bolt?

A. To prevent the loss of cutters in case the tee bar should break in the hole.

Q. How was provision made for supplying and fitting the single-piece key in this reamer, and what was done in those respects?

A. Reamer No. 120 was a reamer of the old style 2-piece key type, and other than the machining which I mentioned, it was not necessary to do anything more to accomodate the single-piece key.

Q. And after the key was first put in that reamer do you know whether it was taken out at the shop again? A. It was.

Q. How was it taken out?

A. It was first taken out with a lever or hooked tool.

Q. Who did that?

A. I don't just remember. It was one of the machinists.

Q. Do you remember of its being taken out in any other manner while it was in the shop?

A. Yes, sir; it was taken out with the tang end of a file.

Q. Who did that? A. Al Houriet.

Q. Who was he?

(Testimony of William G. Knapp.)

A. A machinist in my employ at that time.

Q. Did you see him do it? A. Yes, sir. [188—130]

Q. How did he go about it?

A. I believe he had taken the reamer down, or something like that. And among the tools which he had used was a file laying on the floor, without a handle, and when he went to disassemble the reamer he picked up the file and just stuck it in there and pried out this key.

Q. And how was the key taken out after the file was put in place?

A. The file was inserted under one end of the key and raised up so as to clear the shoulder on the bottom edge of the key and then driven from the opposite side of the reamer and driven through.

Q. Can you produce any drawing or showing which you had at the time this reamer 120 was made over and which shows any of the features thereof?

Mr. LYON.—We object to that, your honor, as calling for a conclusion of the witness.

The COURT.—I think so.

Mr. LYON.—Hand him the drawing and ask him if he ever saw it before, and, if so, what it is.

Mr. BLAKESLEE.—I withdraw the question.

Q. I hand you a drawing or showing on brown paper and ask you if you know what it is, and, if so, what you know about it.

A. Yes, sir. This is a drawing showing the tee-bar that we used in reamer No. 120.

Q. On what part of the sheet is this tee-bar shown?

(Testimony of William G. Knapp.)

A. On the upper part of the sheet.

Q. How is it marked for identification?

A. "Standard 8-inch tee" on one end, which is encircled with red pencil.

Q. The word "Standard" appearing "Std."?

A. Yes, sir. [189—131]

Q. What is shown at the lower left-hand portion of this sheet?

A. An exact outline of the key that was used in this reamer, the first key that was used in the reamer.

Q. Do you know who made this exact outline of the key on this sheet? A. Yes, sir.

Q. Who? A. Myself.

Q. How did you make it?

A. By simply laying the key down on the sheet and using a pencil and tracing around the edge of the key.

Q. What key was that?

A. The first 1-piece key that was used in our plant.

Q. When did you make this outline of the key?

A. April 22, 1911.

Q. How did you come to make it?

A. I made it as a record.

Q. For what purpose?

A. To be used in case we had to send another key to parties who bought the under-reamer.

Q. And having made such sketch of the key, what did you do with this sheet with the sketch on it?

A. This sheet was turned in to the office and filed away with the rest of the data on this under-reamer.

Q. From whom did you obtain the sheet with the

(Testimony of William G. Knapp.)

tee bar showing on it?

A. I believe our draughtsman, Mr. Bandell, handed that to me.

Q. And was it or was it not used in connection with making over this reamer 120?

A. It was used.

Q. Prior to the commencement of work in making over this reamer 120, and during the time you were in the shop of the Wilson & Willard Manufacturing Company, was any other under-reamer made or made over having such single-piece key device? [190—132]

A. Prior to the time of making over 120?

Mr. LYON.—Objected to as leading.

Q. (By Mr. BLAKESLEE.) Prior to the time of making this over? A. Not to my knowledge.

Q. When did you come to the shop, again, please?

A. In December, 1908.

Q. Prior to the making over of this reamer 120, had you ever seen or had any knowledge of an under-reamer containing such a single-piece key?

A. No, sir.

Q. Can you state approximately how many Wilson under-reamers embodying or containing such single-piece key were made in the shop of the Wilson & Willard Manufacturing Company from the time reamer 120 was made over until the first of February, 1913?

Mr. LYON.—That is objected to as irrelevant and immaterial. Any rights they had necessarily—or the rights of anyone, by the making of this reamer 120 were fixed; that was a reduction to practice, on be-

(Testimony of William G. Knapp.)

half of someone, and it don't make any difference, so far as priority of invention is concerned or anything else, whether they made another after that or a hundred thousand of them.

Mr. BLAKESLEE.—We disagree. We want to show diligence in exploiting our invention.

Mr. LYON.—We have admitted that you have been making them.

The COURT.—That admission will go, and there will be no further evidence on that.

Mr. BLAKESLEE.—Will the admission be that we made a large number?

Mr. LYON.—We admit that you have been making them ever since and we want an accounting for what you have made. You can call it a hundred or five hundred. If you will admit that there were five hundred made I will admit it.

Mr. BLAKESLEE.—Prior to February 1, 1913?

Mr. LYON.—No. I don't know what the facts were.

Mr. BLAKESLEE.—Then we ask the question to be answered. [191—133] That is the period we are concerned with, and not the period we are charged with infringement.

Mr. LYON.—I admit that there were a large number made. I am not going to say five hundred.

The COURT.—Do you know how many were made and between what periods?

Mr. BLAKESLEE.—Between the time of making this and February 1, 1913—practically two years after. I can only estimate the number.

(Testimony of William G. Knapp.)

The COURT.—Then don't do it. You ought to have books to show that. Somebody ought to know. It seems to me as though the admission ought to be as good as the witness's estimate.

Mr. BLAKESLEE.—I think so, if the admission is that there were a large number made, sold and used.

Mr. LYON.—I didn't say anything about "used"—"made and sold." That is all this man knows about it.

The COURT.—That is all you can show by this witness, surely.

Mr. BLAKESLEE.—Prior to February 1, 1913?

Mr. LYON.—That is what the admission was.

Mr. BLAKESLEE.—I want an admisison that amounts to something—and at the shop of the Wilson & Willard Manufacturing Company? It is admitted it was made at the shop of the Wilson & Willard Manufacturing Company?

Mr. LYON.—You heard the admission three or four times.

Mr. BLAKESLEE.—No, I did not; I heard some of it but not all of it.

We offer in evidence the sketch referred to by the wtiness.

Q. (By the COURT.) Who made these red marks on there, Mr. Knapp? A. I did.

Q. When did you make those red marks?

A. I believe that date over there will show, April 22, I believe, 1911. [192—134]

Q. Where were you when you made them?

A. I was in my office at the shop of the Wilson &

(Testimony of William G. Knapp.)

Willard Manufacturing Company.

Q. Why did you write "special tee for 8-inch reamer No. 120" on here, in lead pencil?

A. Partly because we had never made one so heavy before, and partly because the slot is through the tee, different than the way we would have made them if we had not used the old-style body.

Q. Was this made before or after the construction of this No. 120—this draft?

A. The drawing of the tee bar was made before. The drawing of the key was made after it was completed.

Q. How long after?

A. I can't say positively.

Q. Well, approximately.

A. A month or six weeks.

Q. A month or six weeks after. On this drawing here the two lower corners or lower ends have a notch in them that does not appear on this key that is introduced in evidence, if I understand it. A. Yes, sir.

Q. These notches right here. Those don't appear on this key, do they? A. No, sir.

The COURT.—May I mark that so as to identify it? I have drawn a line from the notches that I desire to indicate, and write "T" at the end of it. Was the key that you made for reamer 120 constructed like this drawing on here? A. Exactly.

Q. And had those nicks out of the lower end as indicated by the arrows pointing from "T"?

A. Yes, sir.

(Testimony of William G. Knapp.)

Q. And that is different, as I understand it, from the key in [193—135] evidence. Is that right?

A. Yes, sir.

Q. (By Mr. BLAKESLEE.) What was the purpose of those notches?

A. The notches were put in there to enable the operator to withdraw the key with a hooked tool that we thought necessary at that time.

Q. And how many such keys for Wilson reamers did you make with such notches?

A. I don't think over half a dozen.

Q. Why were such notches abandoned?

A. Because we found that they were not necessary.

Q. For what reason?

A. We found that by driving a wedge-shaped tool underneath the key it would raise it enough so that you could drive it out.

Q. And after that the keys were made and installed and shipped without those notches? A. Yes, sir.

Mr. BLAKESLEE.—We offer in evidence the brown paper sheet with the sketch and other matter which is under discussion, as "Defendant's Exhibit Wilson Reamer Tee and Key Sketch of 1911," and ask that the same be received.

Q. (By the COURT.) Do you know where that reamer 120 is now? A. No, sir.

The COURT.—Have you made any effort to get that original key?

Mr. BLAKESLEE.—I think I might have developed that with Mr. Wilson. He can explain what is the practice about those reamers. The reamer after

(Testimony of William G. Knapp.)

it is used for some time becomes worn out and it is necessary—

Mr. LYON.—If there is anything in the history of that reamer to go into this case, I would like to have somebody testify that knows something about it. The reamer has never been produced yet.

The COURT.—That is all I want to know about it. Is that right?

Mr. BLAKESLEE.—No, sir; it has never been produced. It was [194—136] shipped to South Dakota and never brought back. That is all.

Cross-examination.

(By Mr. LYON.)

Q. Mr. Knapp, this reamer No. 120 was bored out in order to receive the new enlarged tee bar, was it?

A. Yes, sir.

Q. Was that reamer No. 120 ever assembled with a single-piece key device until after it was rebored and the enlarged tee completed?

A. Not to my knowledge.

Q. You would have known it if it had been?

A. In the plant, yes.

Q. Now, when was this enlarged tee completed? Wasn't it March 8, 1911?

A. I believe that is the date that I turned the shop order in, but the tee may have been completed before that time.

Q. I am asking you now as a matter of fact if it was not March 8, 1911, upon which that tee was completed.

A. No; I think it was completed earlier than that.

(Testimony of William G. Knapp.)

Q. How much earlier?

A. I couldn't say exactly.

Q. Will you refer to the slips here and identify for me the one which shows the last work on that slotted tee? A. I will try. February 27.

Q. You testified in the interference, did you not?

A. I did.

Q. Was not question No. 57, as follows, asked you, and answered by you as follows: "The next sheet—"

The COURT.—Hadh't you better show that to him so that he can have it before his eyes and so there will be no necessity to reread it, and all that sort of thing? [195—137]

By Mr. LYON.—(Showing transcript to the witness.) "Q. The next sheet?"

A. The next sheet was dictated by myself for the purpose of forging and machining the tee bar for reamer No. 120, also making three springs for the same. This work was finished and the order turned in March 8, 1911, and O.K.'d by myself." Is that a correct statement of the testimony given by you at that time?

A. I believe it to be.

Q. And was that testimony true and correct?

A. The testimony is correct in this respect: that that is the time and the date that I O.K.'d the shop order and turned it in to the office; not the exact date when the article was completed.

Q. Have you any personal recollection as to any of these matters other than as they are on these slips—as to the work or the date?

(Testimony of William G. Knapp.)

A. Nothing other than what these slips show.

Q. Then when you gave the answer that the work was completed and the shop order turned in March 8, 1911, that was your recollection and your best information from these shop slips at the time that you gave that testimony, wasn't it?

A. I believe I meant to say—

Q. Answer the question.

A. Well, it is just as I stated here before. I think that is the time I O.K.'d that shop order and turned it in.

Q. Since giving your testimony in that interference you have talked this case over with someone else, haven't you? A. Not to speak of.

Q. Not before taking the stand here?

A. I read over my previous testimony.

Q. Did you read my brief in the Patent Office case?

A. No, sir.

Q. Did you discuss anything about the hearing there with anyone? [196—138] A. No, sir.

Q. Talk with Mr. Blakeslee or Mr. Wilson about it in any manner?

A. No, sir; not about the Patent Office suit.

Q. Not with relation to when this slotted tee was completed? A. No, sir.

Q. Or when it was first put in the reamer?

A. No, sir.

Q. When was it that Mr. Houriet made this discovery that you could remove this single-piece key by simply driving in the tang end of a file?

A. I believe it to be probably the second or third

(Testimony of William G. Knapp.)

time we assembled that reamer.

Q. And when was that, according to your recollection?

A. I believe that to be in the latter part of February.

Q. When you testified in this case in the Patent Office you did not even know the name of that man, did you? A. Who? Al Houriet?

Q. Who the workman was that was alleged to have made that discovery. A. I don't think so.

Q. Didn't you testify that a workman did, and you didn't know his name?

A. I hardly think so, unless you have it there.

The COURT.—Before you get away from that, is there a conflict in the witness' testimony and what he gave at that time?

Mr. LYON.—I allege that there is, absolutely, yes, sir.

Mr. BLAKESLEE.—We agree to have it shown as easily as possible—

The COURT.—Wait a minute, Mr. Blakeslee. What is the date given in the testimony that you read?

Mr. LYON.—He says, "This work was finished and the order turned in on March 8, 1911, and O.K.'d by myself." [197—139]

The COURT.—What is the testimony now?

Mr. LYON.—He says he thinks the work was finished somewhere about February 27, 1911.

A. That was the last time-card. May I explain?

The COURT.—Yes, sir.

(Testimony of William G. Knapp.)

A. The workmen as they perform the work, at the end of every day they turn in a card with the date, their name and the article, and the amount of time they put in on the job.

The COURT.—I understand that.

A. The last card turned in on the tee bar was February 27. Now, these yellow slips were turned over to me for the general work; that is, the complete job. Now, there are several operations on each job. I didn't turn those in until the complete job was finished.

Q. (By the COURT.) When was that?

A. March 8. That is when reamer 120 was completed entirely. Now, the tee bar could have been finished before that.

Q. (By Mr. LYON.) On March 8, 1911, this reamer 120 was completed in its reorganized form with this single-piece key device in it, was it?

Mr. BLAKESLEE.—We think this is misleading.

The COURT.—I think I understand the question, and the witness ought to understand it.

A. I think the reamer was completed before that time, but not tempered, if you might term that part of the completion.

Q. (By Mr. LYON.) What did you mean by saying in the preceding answer that the reamer was completed on March 8, 1911? I want to find out what your present testimony is.

Mr. BLAKESLEE.—If your Honor please, the testimony is not that way. The testimony was that the reamer was finished and the order was turned in

(Testimony of William G. Knapp.)

on March 8. He does not say it was finished on March 8. (The testimony is read at the request of the Court.)

The COURT.—That is what I understand the testimony to be, Mr. Blakeslee. [198—140]

Q. (By Mr. LYON.) So that there may be no misunderstanding, Mr. Knapp, are you testifying that this reamer order 120 was entirely completed on March 8, 1911? A. May I look at these slips.

Q. Certainly. I want to know what the facts are.

The COURT.—We don't want any guessing about it, if we can get at the facts.

A. I made a mistake when I made that assertion.

Q. (By Br. LYON.) I thought so. What is the correct statement?

A. The date this shop order was turned in for the reconstruction of reamer 120 is April 22. But the reamer could have been completed before that time.

Q. Now, with the best information that you can get from all these slips, are you prepared to state that that reamer was completed before April 14, 1911?

A. I am.

Q. When was it completed, then, according to your present deduction? A. March 6, 1911.

Q. Did Mr. E. C. Wilson at any time give you a sketch of a single-piece key that was to be made and used in reconstructing this reamer 120 otherwise than as the rough indication of it on his hand?

A. Not that I remember of.

Q. Will you state positively that he did not?

A. No, sir; I could not.

(Testimony of William G. Knapp.)

Q. Will you state positively that you did not have a sketch of such single-piece key on paper during the time that this reamer No. 120 was being reconstructed? A. I could not state so now; no, sir.

Q. How many of these 1-piece keys did you say were made with these notches in the lower extreme corners? [199—141]

A. Very few. I believe I just testified not over a half a dozen. I couldn't say with any degree of certainty just how many.

Q. Are you positive that more than one was made with such notches?

A. Not absolutely positive; no, sir.

Q. Now, Mr. Knapp, you are familiar with the customs in the Wilson & Willard shop in regard to the manner of fastening drawings or paper on boards when they are making drawings there, aren't you?

A. Yes, sir.

Q. They are ordinarily fastened to the board by thumb tacks?

Mr. BLAKESLEE.—Objected to as immaterial.

The COURT.—Overruled.

A. You mean on the draughting board?

Q. (By Mr. LYON.) Yes.

A. Yes, sir.

Q. And how many thumb tacks are ordinarily used?

A. Ordinarily four, and sometimes six.

Q. Now, referring to "Defendant's Exhibit Wilson Reamer Key and Tee Sketch of 1911," there has evidently been a portion of this paper cut off at the right-

(Testimony of William G. Knapp.)

hand side, hasn't there?

Mr. BLAKESLEE.—Objected to as calling for a conclusion and not for a statement of facts. The exhibit speaks for itself.

The COURT.—I don't know. He saw this paper at different times. He may know whether anything was cut off or not.

Mr. BLAKESLEE.—Then the question is objected to as indefinite as it does not state the time.

The COURT.—I will let him answer the question.

A. To the best of my knowledge this drawing is complete the way I first saw it.

Q. (By the COURT.) Just as it is now?

A. Yes, sir; with the exception of the notations that I put on there myself. [200—142]

Q. What have you to say with regard to the absence of any thumb-tack holes except in the left-hand corner of this sheet of paper? Have you any distinct recollection of that paper?

A. Not any distinct recollection of the paper other than it is customary for draughtsmen when they lay out a piece of paper on their table or their board to get a large piece, and they start and make their drawing in one corner, and if they have some left they cut it off. Otherwise they fill the complete sheet of which we have standard sizes.

Q. And as far as you can recollect this was cut down when you first saw it in this way?

A. As far as I can recollect; yes, sir.

Q. And when did you first see this drawing?

A. I can't tell you exactly. There is no date, and

(Testimony of William G. Knapp.)

I have no data and no way of knowing.

Q. You have no recollection of it otherwise than the fact that you dated the 4-22-11 on it in red pencil. Is that true?

A. I recollect of having the drawing when I made the tee bar.

Q. For that reamer? A. No, sir.

Q. You have no recollection as to when you first saw it or its entire condition at any one of those times otherwise than as I have stated, have you?

A. Well, I believe that I stated that ~~is~~ practically the way that I received it, and I had it at the time that we manufactured the tee bar.

Q. Did you ever see this drawing, with any of the portion which has evidently been cut from the paper here, with that on it? A. Not to my knowledge.

Q. Will you state positively that you never did see it with an additional piece of paper on there?

A. I think I can.

Q. How long after Mr. Houriet, as you say, made this discovery [201—143] that the single-piece key could be removed with the tang end of a file was it before you dropped the making of the single-piece keys with the notches, to which your attention has been called, in the lower corner?

A. I cannot state exactly; it was a very short time.

Q. Did you ever make one of the single-piece keys for a Wilson under-reamer with such notches in it after Houriet made that discovery?

A. I don't remember.

Q. You don't remember having made one that way

(Testimony of William G. Knapp.)

after that time? Is that your testimony? Is that correct? A. Yes, sir.

Q. Will you state positively that this reamer No. 120 was shipped to the Norbeck & Nicholson Company with this key in it with the notches in the corner as indicated?

A. To the best of my knowledge; yes, sir. In fact, I made the sketch of that key, or the outline, just previous to shipping the reamer.

Q. And previous to shipping that reamer you had not abandoned the notches in the corners of the key, had you? A. I cannot say as to that.

Q. What is your recollection?

A. I don't think we were using them.

Q. What is the object of the slight bevel at the lower corner of the key of Defendant's Exhibit 1?

A. This point here, Mr. Lyon?

Q. Yes.

A. That is beveled off for the purpose of allowing the key wedge to be inserted to lift the key up to clear this shoulder.

Q. In order to allow whatever kind of a tool you drive in there to run under easily? Is that it?

A. That is the idea; yes, sir. [202—144]

Q. What would be the effect upon such an instrument as this used in raising this end of the key if these beveled portions were not so beveled on the key?

A. You can have that key perfectly straight on the bottom and still insert the key wedge underneath it, provided the key wedge was sharp enough.

Q. And then, if I understand you correctly, it is

(Testimony of William G. Knapp.)

for the purpose of permitting the use of a more blunt key wedge?

A. Also to make the insertion easier; that is all.

Mr. LYON.—That is all.

Redirect Examination.

(By Mr. BLAKESLEE.)

Q. I now show you “Defendant’s Exhibit Specimens of Grigsby’s Handwriting or Shipping Receipt,” and ask you if you know anything about it.

Mr. LYON.—Objected to as irrelevant, immaterial and not redirect examination.

The COURT.—Overruled.

A. This looks very much like Mr. Grigsby’s signature at the bottom, and pertains to the 10-inch Wilson under-reamer, No. 496, with one small lever attached, shipped to the Kern Trading and Oil Company at Kerto, California.

Q. (By Mr. BLAKESLEE.) Do you know what the significance of that “one small lever attached” is?

A. Yes, sir. That is the small lever for raising up the end of the key to allow it to be driven out.

Q. And with what type or with what form of single-piece keys was such small lever used?

A. As far as I know the same as shown here, with the small key. Of the same type as that.

Q. (By Mr. LYON.) You mean the one out of “Defendant’s Exhibit 1”? [203—145]

A. Yes, sir.

Q. (By Mr. BLAKESLEE.) I show you a lever or piece of metal, rather, and ask you if you know

(Testimony of William G. Knapp.)

anything about such a design of metal.

Mr. LYON.—Objected to as not redirect examination.

Mr. BLAKESLEE.—I am going into this question of the lever and notches, and so forth.

The COURT.—Is it material in the case?

Mr. BLAKESLEE.—I think it is material.

A. The design of that lever is very similar to the first levers we used for removing the keys from the under-reamer—the single-piece keys. That is what those notches in the drawing illustrated—to hook underneath there and pull it out.

Q. Do you know whether that is the kind of lever referred to in the receipt before you?

Mr. LYON.—Objected to as leading and suggestive.

Mr. BLAKESLEE.—I ask as to his knowledge.

The COURT.—Overruled.

A. To the best of my knowledge it is, yes, sir.

Mr. LYON.—We move to strike the answer from the record as not responsive. He does not say that he does know that it is or does know that it is not.

A. To the best of my knowledge it is.

Mr. LYON.—That don't mean anything.

Mr. BLAKESLEE.—I asked him within his knowledge.

Q. Do you know whether there was such a lever shipped with reamer 120 which went to the Norbeck & Nicholson Company?

Mr. LYON.—This is all leading. I think counsel ought to refrain from leading the witness.

(Testimony of William G. Knapp.)

The COURT.—He asks him if he knows.

A. I think there was; yes, sir.

Q. (By the COURT.) Do you know about it?

A. I am positive that there was; yes, sir. [204—146]

Q. (By Mr. BLAKESLEE.) Do you know whether any such lever was at any time used in the shop of the Wilson & Willard Manufacturing Company to extract such single-piece key from reamer No. 120? A. Yes, sir; there was.

Q. How long had such a lever been in the shop of the defendant company prior to that time, to your knowledge?

A. We used a lever similar to construction to that for raising the block and compressing the spring on the old style block and screw type under-reamer.

Q. Do you know who designed such lever?

A. No, sir; I do not.

Q. How long had it been in the shop for that purpose to your knowledge? A. A year and a half.

Q. Are we to understand or not that your recollection of making over reamer 120 rests upon the various shop slips of order 6904 and order 7056?

Mr. LYON.—Objected to as leading and calling for a conclusion of the witness.

The COURT.—The objection is overruled.

A. That is the only way I have at this time; yes, sir.

Q. (By Mr. BLAKESLEE.) To what extent do you base your recollection on those shop slips?

The COURT.—I think he has stated that that is

(Testimony of William G. Knapp.)

the only way he gets at the time—by referring to those. I don't see how you can get anything else out of the witness.

Q. (By Mr. BLAKESLEE.) I will ask another question. Irrespective of the details of the construction and assemblage of parts of reamer 120, what have you to say as to any recollection of the act of making over reamer 120 at the shop?

Mr. LYON.—Objected to as leading and as already answered. [205—147]

The COURT.—The objection is sustained. Mr. Witness, do you remember this reamer 120 being in the shop? A. Yes, sir.

Q. You distinctly remember that? A. Yes.

Q. And you made it over? A. Yes, sir.

Q. You distinctly remember that? A. Yes, sir.

Q. But you don't have any recollection as to the date in regard to when that work was done except as indicated to your mind by these slips?

A. Yes, sir, which I have O. K.'d.

Q. Have you any independent recollection?

A. No, sir.

Q. You testify, then, from what these slips indicate to your mind is the date when that work was done? A. Yes, sir.

The COURT.—I think that makes it clear.

Q. (By Mr. BLAKESLEE.) And how with respect to the sketch you say Mr. Wilson made for you on his hand with a pencil of this single-piece key? What is such recollection based on?

A. As far as dates go, nothing other than that it

(Testimony of William G. Knapp.)

preceded these time-cards.

Q. And have you anything upon which you base such recollection as to the occurrence itself?

A. Other than I was running through or machining a pretty good-size order of old-style tee bars and they were partially machined when Mr. Wilson in passing through the shop one day discovered them and told me not to go ahead with them any further, as they were contemplating changing over their reamer and adopting the new style. [206—148]

Q. What relation is there between that occurrence and the making of the sketch on his hand for you?

A. The making of that sketch probably occurred two or three days after he told me to cease operations on those old-style tee bars.

Q. Was it or was it not customary for Mr. Wilson to give you instructions by means of such hand sketches with a pencil?

Mr. LYON.—Objected to as leading—

The COURT.—The objection is sustained.

Q. (By Mr. BLAKESLEE.). Now, before these various order slips were O.K.'d and turned in, as I understand it, on March 8, 1911, was reamer 120, or was it not, so far completed in its new form and condition that it might be assembled with a single-piece key?

Mr. LYON.—Objected to as leading and argumentative.

The COURT.—The objection is sustained.

Q. (By Mr. BLAKESLEE.) How far was reamer 120 completed prior to March 8, 1911?

(Testimony of William G. Knapp.)

Mr. LYON.—Objected to on each of the last grounds.

The COURT.—This witness has been exhausted on that subject. You asked him about it and he was cross-examined. I think you have spent enough time on it.

Mr. BLAKESLEE.—There are some points obscure in my mind as to his testimony.

The COURT.—Get down to it directly, then.

Q. (By Mr. BLAKESLEE.) After February 27, 1911, what was done on this reamer 120?

Mr. LYON.—Objected to on the ground that the witness has shown—

The COURT.—Overruled.

A. I couldn't say anything about that without referring to the time-cards again.

Q. (By Mr. BLAKESLEE.) You may refer to the time-cards.

The COURT.—I don't think so. The time-cards show. There is no reason for this witness to state it if the time-cards show.

Q. (By Mr. BLAKESLEE.) When was this reamer 120 hardened or [207—149] tempered, as you say it was?

A. The time-cards also show that, Mr. Blakeslee.

Q. And what was done with this reamer between March 8, 1911, and April 22, 1911, when you made the sketch of the key on the exhibit paper before us?

A. It was in the machine shop for a time and later removed to the blacksmith-shop and there used for demonstration purposes.

(Testimony of William G. Knapp.)

Q. Do you recollect having any paper sketch whatsoever of the single-piece key before you during the time reamer 120 was being made over?

A. I have no clear recollection of having any.

Mr. BLAKESLEE.—That is all.

Recross-examination.

(By Mr. LYON.)

Q. Mr. Knapp, you say Mr. Wilson drew a sketch on his hand of this single-piece key. How long before you started work on the rebuilding of reamer 120 was it that he made that sketch on his hand for you?

A. I believe it was a matter of possibly a day; not more than that.

Q. And who was present at that time besides Mr. E. C. Wilson? A. No one but myself.

Q. Now, you have been in the courtroom here during the taking of most of the deposition of Mr. E. C. Wilson in this case, haven't you? A. Yes, sir.

Q. And you have heard his testimony in regard to calling a conference in the back of the shop and his testimony that he believed you were present at such conference? A. Yes, sir.

Q. What have you to say as to your presence at any such conference? [208—150]

A. I don't remember being present at any conference of that kind.

Mr. LYON.—That is all.

Mr. BLAKESLEE.—That is all.

(Whereupon an adjournment is taken until tomorrow, March 25, 1915, at 10 o'clock A. M.) [209—151]

[Testimony of Charles E. Wilcox, for Defendants.]

Thursday, March 25, 1915, 10 o'clock A. M.

CHARLES E. WILCOX, called as a witness on behalf of defendants, being first duly sworn, testified as follows:

Direct Examination.

(By Mr. BLAKESLEE.)

Q. Please state your full name, age, residence and occupation, Mr. Wilcox.

A. Charles E. Wilcox; forty-seven years old; residence, Woodford, California; occupation, oil well driller.

Q. What do you mean by the term "oil well driller"? A. Sinking of oil and gas wells.

Q. What sort of work have you done of that nature? A. Drilling.

Q. What have you done in drilling operations?

A. Commenced and completed wells.

Q. What sort of tools have you used?

A. What is known as standard tools.

Q. What kind of tools do you mean by "standard tools"? For what purposes are they used and what are they called?

A. Well, I worked with tools consisting of the bit, stem, jars and rope sockets.

Q. (By the COURT.) Ordinary oil well tools?

A. Ordinary oil well tools.

Q. (By Mr. BLAKESLEE.) You have used under-reamers, casing spears and casing perforators and drilling bits, and so forth, have you?

(Testimony of Charles E. Wilcox.)

A. Yes, sir.

Q. In what fields?

A. Mostly in Pennsylvania and Ohio. [210—152]

Q. How long have you been in California?

A. Fifteen years.

Q. What has been the nature of your work in California in the oil well industry?

A. Well, along the lines of drilling wells and selling oil well machinery and oil well tools.

Q. Have you ever used a Wilson under-reamer?

A. No, sir.

Q. What experience have you had with Wilson under-reamers, if any?

A. I worked for the Wilson & Willard Manufacturing Company as their field representative and outside salesman for a matter of four years.

Q. That is the defendant company in this suit?

A. Yes, sir.

Q. What period of time was it that you were connected with this company?

A. From along about the first of January, 1911, up until quite recently of this year.

Q. Up until this year? A. Yes, sir.

Q. When did you sever your connection with that company?

A. About the 1st of February, I believe, or the last of January.

Q. Briefly, what was the general nature of your work or services with the Wilson & Willard Manufacturing Company?

A. I solicited business through the different oil

(Testimony of Charles E. Wilcox.)

fields of California.

Q. What did you sell for that company?

A. Under-reamers, elevators and circulating-heads.

Q. Have you examined "Defendant's Exhibit 1" here in the room, the under-reamer exhibit? [211—

153] A. I have not.

Q. Please refer to it briefly and tell us if you are familiar with this device.

A. Yes, sir; I am. (After examining exhibit.)

Q. When did you first see a Wilson under-reamer of this sort including the single-piece key which confines the lower end of the spring?

A. Sometime between the 1st of January, 1911, and I would say the 1st of March.

Q. Where did you see it?

A. The Wilson & Willard Manufacturing Company's place of business at 15th and Santa Fe Avenue.

Q. Did you see others of that same general construction including the one-piece key during the year 1911?

A. I have seen others of the same type in 1911; yes, sir.

Q. And during 1912? A. Yes, sir.

Q. By whom were they made?

A. By the Wilson & Willard Manufacturing Company.

Q. Approximately how many did you see in those two years?

The COURT.—I will sustain an objection to that.

(Testimony of Charles E. Wilcox.)

There is a stipulation on that, Mr. Blakeslee.

Q. (By Mr. BLAKESLEE.) What if anything did you have to do with such Wilson reamers during those years?

Mr. LYON.—I think that is immaterial, in view of the stipulation, your Honor.

Mr. BLAKESLEE.—It is to show his familiarity.

Mr. LYON.—We will stipulate that he is familiar with that type of Wilson reamer.

Q. (By Mr. BLAKESLEE.) What did you have to do in that period of time with those Wilson reamers?

Mr. LYON.—Objected to as immaterial. [212—154]

The COURT.—What do you want to prove by that?

Mr. BLAKESLEE.—I want to show a little further his familiarity and what he did with them.

The COURT.—It is admitted that he is familiar with them.

Q. (By Mr. BLAKESLEE.) Have you ever seen such a Wilson under-reamer in operation?

A. Yes, sir.

Mr. BLAKESLEE.—That, your Honor, there has been no stipulation about.

The COURT.—He has testified he has seen them in operation.

Q. (By Mr. BLAKESLEE.) When did you first see such Wilson under-reamer in use or operation?

A. Along in 1911.

Q. And under what circumstances and where?

(Testimony of Charles E. Wilcox.)

A. Well, I believe I have seen them in the southern field here and also in the Taft and McKittrick or Taft and Maricopa fields.

Q. Those are in this state? A. Yes, sir.

Q. How was such reamer being used?

A. In the general way of drilling oil wells.

Q. What did you see in connection with its use at such times?

A. Well, I seen them lowered in the hole and removed from the hole, change the cutters, and so on.

Q. And what was the general purpose of using such under-reamer in oil well drilling?

A. To enlarge the hole so that the casing would follow.

Q. Did you make any observation as to the handling of the casing during the use of such Wilson under-reamers? A. Yes, sir.

Q. What was done with the casing?

A. After the hole was reamed they lowered the casing as far [213—155] as it had been reamed.

Q. How many times, approximately, did you see such use and operation of such Wilson reamer during the years 1911 and 1912?

A. Oh, I would say fifty times.

Q. (By Mr. LYON.)—Were they successful, Mr. Wilcox, in use? A. Yes, sir.

Mr. LYON.—I think that is all you need to prove along that line.

The COURT.—You don't controvert that fact?

Mr. LYON.—No, sir.

The COURT.—Well, that ends that controversy.

(Testimony of Charles E. Wilcox.)

Q. (By Mr. BLAKESLEE.) What do you remember, and what can you tell us about the first of these Wilson under-reamers which you say you saw in the early part of 1911?

A. Well, they made one down there at the shop and kept it in different places in the shop for demonstrating purposes for quite a period of time.

Q. Did you witness the work on this reamer?

A. Some of it; yes, sir.

Q. Were you in and out of the shop at that time?

A. I was back and forth from the field to the shop, and sometimes I would be in the shop all day and other times I would be out.

Q. Do you know in whose charge this work proceeded?

A. I believe it was supervised by Mr. Knapp, the foreman.

Q. The foreman? A. Yes, sir.

Q. And did you see that reamer when it was assembled in the shop? A. Yes, sir.

Q. When did such a single-piece key device as you say was included in these Wilson reamers first come to your knowledge? [214—156]

A. You mean the key—the finished product? Or—

Q. Well, in the first case the finished product.

A. Well, as I stated before, it would be sometime between the first of January and the first of March.

Q. (By the COURT.) You saw this reamer 120 there in the shop? Q. Yes, sir.

Q. Did you see this 1-piece key in it?

A. Yes, sir.

(Testimony of Charles E. Wilcox.)

Q. The key in controversy in this case?

A. Yes, sir.

Q. Do you know when that was?

A. As I said before, I couldn't fix it—

The COURT.—You can't fix the date any more definitely then you have fixed it? A. No.

Q. You have no memoranda to show the date?

A. No, sir.

The COURT.—Go ahead.

Q. (By Mr. BLAKESLEE.) When did you first hear about such a key?

The COURT.—It don't seem material when he heard about it.

Mr. BLAKESLEE.—I am trying to prove certain facts concerning the production of the key; not the manufacture, but the origination of it.

The COURT.—All right. When did you first hear about it?

A. Well, I heard Mr. Wilson discussing something in regard to a key shortly after he got a certain letter from Mr. Williams of the Pacific Iron Works at McKittrick, California.

Q. Did you see that letter that you have referred to?

Q. (By Mr. LYON.) Did you see it at that time?

A. No, sir.

Q. (By Mr. BLAKESLEE.) Have you seen that letter since? [215—157]

The COURT.—He couldn't tell whether that was the letter or not if he didn't see it at the time.

(Testimony of Charles E. Wilcox.)

Mr. BLAKESLEE.—I don't know how soon he saw it.

Q. When was that letter received, to the best of your recollection?

Mr. LYON.—Objected to as incompetent.

The COURT.—Overruled.

A. I don't know.

Q. (By Mr. BLAKESLEE.) What knowledge have you about the receipt of that letter?

A. I heard Mr. Wilson discussing the fact of getting a letter from Mr. Williams in regard to a key or a tee, I am not positive which.

Q. (By the COURT.) A key or what?

A. A key or a slotted tee.

Q. (By Mr. BLAKESLEE.) How do you fix the time of the receipt of that letter?

A. It was shortly after I went to work for the Wilson & Willard Manufacturing Company.

Q. And how soon after the receipt of that letter, as nearly as you can fix the time of such receipt, did you first hear about this single-piece key or about a single-piece key?

A. It was only a few days after I heard little bits of conversation in regard to the letter that I saw some sketches of a key.

Q. Under what circumstances did you see those sketches?

A. Mr. E. C. Wilson and Mr. R. E. Bole and Mr. A. G. Willard were standing at a desk used for a shipping clerk's desk. They were standing with their backs to me. I was standing probably four or

(Testimony of Charles E. Wilcox.)

five feet from them, or six feet, or maybe ten. They turned around going up the center aisle. The three parties turned around and made a step or two away from the bench or desk, as though they were going up the center aisle of the shop, and Mr. Wilson [216—158] had a sketch on a yellow piece of paper of a key similar to the one that is made now and used in the Wilson reamer.

Q. What shop do you refer to in your last answer?

A. The Wilson & Willard Manufacturing Company's shop.

Q. In what part of the shop was this desk?

A. The north end of the shop.

Q. Which end was that, the front or the rear?

A. That would be the rear.

Q. Was there any door opening into the shop near it? A. Yes, sir.

Q. How near?

A. About eight feet, I would say, to the center of the doorway.

Q. Do you remember what piece of machinery or what machine tool was nearest that desk in that shop at that time?

A. A planer, I believe, or shaper.

Q. How far from the desk was it?

A. Twenty feet, I would say, or twenty-five, possibly.

Q. And who was the Mr. Bole whom you refer to in your last answer? A. Mr. Robert E. Bole.

Q. One of the complainants in this case?

A. Yes, sir.

(Testimony of Charles E. Wilcox.)

Q. And Mr. Wilson is one of the defendants in this case? A. Yes, sir.

Q. Have you ever seen the sketch you have stated Mr. Wilson had at that time, since that time?

A. Not to my knowledge; no, sir.

Q. Have you since that time attempted to reproduce the sketch you saw then?

A. Yes, sir. [217—159]

Q. When and under what circumstances?

A. In taking testimony in regard to this interference suit, in Washington, I believe.

Q. Where was that testimony taken?

Mr. LYON.—That is immaterial.

The COURT.—It seems so to me.

Q. (By Mr. BLAKESLEE.) About when was it that you made this reproduction sketch?

Mr. LYON.—The sketch is here and I suppose it is going to be offered in evidence, and it is dated, and I don't see what counsel wants to waste time on it for.

Mr. BLAKESLEE.—We are willing to cut it short. We simply want to prove our case, and that is all.

Q. Is this the sketch you made at that time in reproduction of the sketch you saw Mr. Wilson hold?

A. I believe it is; yes, sir.

Mr. BLAKESLEE.—Let the record show that the witness is handed a sketch entitled "Wilson's Exhibit Charles E. Wilcox Key Reproduction Sketch," dated June 19, 1914.

Q. What did you intend to show by that sketch?

A. I intended to show that that was an outline of a key similar to the one that is being used in the Wilson

(Testimony of Charles E. Wilcox.)

reamer at the present time.

Q. How about the sketch that you saw Mr. Wilson hold near the shipping desk?

Mr. LYON.—Objected to as leading and suggestive.

The COURT.—Overruled.

A. When I drew that sketch I tried to produce a sketch as near as I could from memory of the one that Mr. Wilson had in his hand at the time at the shipping desk.

Q. (By Mr. BLAKESLEE.) About how far away from Mr. Wilson did you stand when you saw this sketch in his hand at that time? [218—160]

A. Well, when they turned away from the desk they passed directly past me not more than a couple of feet, I suppose.

Q. And how far did you stand from them when you first saw the sketch?

A. Well, that was when I first seen the sketch, when he turned around and had it in his hand and passed me. Possibly he stopped here a few minutes.

Q. Was anything said at that time by either Mr. Bole or Mr. Wilson, and, if so, please tell us all that you remember that was so said, giving us as nearly the exact words as you can?

Mr. LYON.—Just a moment. The question says “at that time,” and I would like counsel to make that question definite and I think he should in fairness include all of the conversation that the witnesses overheard at that time, whether it was at the shipping desk, or when they turned away, or where it was, and

(Testimony of Charles E. Wilcox.)

not fragments of it.

The COURT.—I think you ought to go at it directly, Mr. Blakeslee, and find out all he heard these parties say about this from the beginning to the end; as I understand it, that is one of the important circumstances in the case, and you are fooling away a good deal of time on trivial and unimportant things. Get at this thing and get out all the facts.

Mr. BLAKESLEE.—Strike out the question.

Q. Please tell us, Mr. Wilcox, all that you remember that occurred during the period of time in which you saw Mr. Willard, Mr. Bole and Mr. E. C. Wilson near the shipping desk, and the time at which you saw this sketch which you say you have here reproduced, and also what during that period of time, including all of these circumstances or episodes or acts, all that you heard either party say.

The COURT.—Q. Please state all you heard and saw about the time you saw this reamer 120 in the shop and these parties together. [219—161] All you heard any of them say when the parties were present—Mr. Wilson and Mr. Bole—about this key.

Mr. LYON.—Reamer 120 was not in existence at that time embodying this invention. This is in regard to a conversation that he heard between Bole, Willard and Wilson in regard to this single-piece key and sketch.

The COURT.—All right. State all you heard and saw about that.

A. I think, as I said before, Mr. Wilson, Mr. R. E. Bole and Mr. A. G. Willard were standing at a little

(Testimony of Charles E. Wilcox.)

bit of a shipping desk. I couldn't hear anything they said. And finally they turned around away from the shipping desk and they stopped right opposite me. Mr. Wilson had a piece of yellow paper in his hand, and a pencil. He says, "Oh, I know how to get it in there, but I don't know how to get it out." Mr. Bole says, "Pry one end of it up and drive it out." They passed on out of my hearing, and that was about all I heard at that time.

Q. (By the COURT.) When did that occur?

A. Very shortly after I went to work for the Wilson & Willard Manufacturing Company, and I went to work for them about the 1st of January.

Q. What year? A. 1911.

Q. (By Mr. BLAKESLEE.) And what, if anything was on the yellow piece of paper which you saw Mr. Wilson hold at this time?

A. There was a sketch of a key.

Q. (By the COURT.) Did you have it in your hand? A. No, sir.

Q. How did you come to see this sketch?

A. That would be the same as if a man came walking by here and stopped within two or three feet of me and was standing there talking about it holding it that way in front of him and [220—162] I would look over and see it.

The COURT.—Proceed.

Q. (By Mr. BLAKESLEE.) Can you mention anyone else who was in close proximity to yourself or to Mr. Wilson, Mr. Bole or Mr. Willard at the times you have last told us about?

(Testimony of Charles E. Wilcox.)

Mr. LYON.—I think that is leading and suggestive and calling for a conclusion of the witness.

The COURT.—I will overrule the objection.

A. Mr. W. W. Wilson and Mr. Knapp were over about the door. That would be five or six feet or eight feet from the desk.

Q. (By Mr. BLAKESLEE.) Who was this Mr. W. W. Wilson? A. A brother of E. C. Wilson.

Q And Mr. Knapp?

A. Mr. Knapp was foreman of the shop.

Q. How long were you in that vicinity? How long a period of time has your testimony covered with relation to this group of people and this talk about putting a key in and prying it out and your seeing a sketch, as you say you did?

A. I don't believe they were there over ten minutes, or such a matter.

Q. How long were you in that vicinity?

A. I believe I stayed in that end of the shop and they went away from me.

Q. Were or were not those people of that group together when you first came to that end of the shop?

Mr. LYON.—I object to that as leading and suggestive, your Honor.

The COURT.—It is both, but I will overrule the objection.

A. I couldn't say whether they were all together or not.

Q. (By Mr. BLAKESLEE.) When you first saw this group of three people together, including Mr. Wilson, Mr. Bole— That is, when you first saw

(Testimony of Charles E. Wilcox.)

them—where were Mr. Knapp and Mr. W. W. Wilson? [221—163]

A. Well, I believe they were all down at that end of the shop.

Mr. BLAKESLEE.—We offer in evidence the reproduction sketch referred to by the witness in his testimony and ask that the same be received and marked “Defendant’s Exhibit Charles E. Wilcox Key Reproduction Sketch.”

Q. (By the COURT.) Is this a reproduction of what Mr. Wilson had in his hand at the time of this conversation?

A. Yes, sir; as near as I could make it from memory.

Q. And you did not have the sketch in your hand at the time of this conversation? A. No, sir.

Q. Did Mr. Wilson make any offer to show it to you, or did you just incidentally see it?

A. No, he did not; but I say, he stepped right alongside of me and I could see it.

The COURT.—Go ahead.

Q. (By Mr. BLAKESLEE.) I show you a piece of metal and ask you if you have ever seen any such shaped metal before. A. Yes, sir.

Q. Where, and under what circumstances?

A. Well, I have seen something along the same order down at the Wilson & Willard Manufacturing Company.

Q. Do you know what it was used for there, if anything?

A. It was used for raising the block in a block and

(Testimony of Charles E. Wilcox.)

screw type Wilson under-reamer.

Q. When did you first see such a shaped piece of metal there? A. About October, 1910.

Q. And after that, did you see it at the shop?

A. Yes, sir.,

Mr. BLAKESLEE.—We ask that this piece of metal be marked for identification “Wilson Reamer Block Elevating Lever.”

(Marked Defendant’s Exhibit No. 9.) [222—164]

Q. (By Mr. BLAKESLEE.) Did you ever see such a lever used for any other purpose at that shop?

A. Yes, sir.

Q. For what purpose?

A. When they first commenced making the present type of reamer, I believe they tried to take the key out with a tool of something the same order.

Q. Did you see such attempts made there?

A. Yes, sir.

Mr. BLAKESLEE.—That is all.

Cross-examination.

(By Mr. LYON.)

Q. Mr. Wilcox, you saw on several occasions after reamer No. 120 was completed and finished with the single-piece key device therein and the enlarged heavy slotted tee put in its place, the operatives of the Wilson & Willard Manufacturing Company using devices like “Defendant’s Exhibit No. 9” in attempting to remove the single-piece key from the reamer, did you?

A. Not after the reamer was completed.

(Testimony of Charles E. Wilcox.)

Q. When did you see it?

A. Well, I seen a tool of that description used, I would say, the first time or the second time that the present type of reamer was manufactured and they were assembling it.

Q. You mean the first one or two of those reamers that were made, or what?

A. I mean the first one.

Q. Is there any way that you can fix positively any of the dates of these occurrences that you have referred to? A. No, sir.

Q. And so far as your recollection serves you, then, this conversation at the shipping desk and in its immediate vicinity [223—165] or proximity, to which you have been referring, might have occurred at any time between the 1st of January, 1911, and the 1st of March, 1911. Is that correct? A. No, sir.

Q. Wherein is it incorrect?

A. Well, as I said before, I fix that time—the only way that I can fix the time definitely would be by the fact that Mr. Wilson had received a letter from the Pacific Iron Works at McKittrick, California.

Q. And you never saw that letter at that time?

A. No, I have not.

Q. When did you see that letter?

A. I don't know as I ever saw it

Q. You saw that letter when you gave your testimony in the interference proceeding in Mr. Blakeslee's office last year—1914—did you?

A. Well, it is possible. I don't recall whether I did or not.

(Testimony of Charles E. Wilcox.)

Q. Now, please tell us what you observed these three men, A. G. Willard, Elihu C. Wilson, and Robert E. Bole, doing at this shipper's desk, at the time you have referred to?

A. I didn't see them do anything at the shipping desk. All three had their backs to me.

Q. You observed nothing whatever that they were doing? A. No, sir.

Q. How far away were you from them at that time? A. It might be six or eight feet.

Q. At any time were you invited to take part in the conversation between them either at the shipping desk or when they turned away therefrom?

A. Not at that time.

Q. At any time during that day, at any conversation with [224—166] regard to such sketch or single-piece key device?

A. I couldn't say whether it was that day or later. Wilson asked me many times what my opinion in regard to the new style reamer was.

Q. Do you now think that you took part in this conversation with regard to this sketch of the single-piece key? A. At that time?

Q. Yes. A. No, sir.

Q. I show you a transcript of your testimony in the deposition to which you have referred, in the interference proceeding, and call your attention first to question 87 and question 88 and your answers thereto, as follows: "Q. 87. How did you come to hear about it? Tell us the circumstances and what you heard. A. Mr. E. C. Wilson and Mr. Bole, and,

(Testimony of Charles E. Wilcox.)

I believe, Mr. A. G. Willard were standing at the shipping desk at the north end of the shop, discussing something about a key. I was standing between the shipping desk and the end of the bench, and Mr. Wilson had a sketch in his hand of a key and he turned around to Mr. Bole, and he says, 'I know how to get it in there, but I don't know how to get it out.' Mr. Bole said, 'Pry one end of it up and drive it out.'

Q. 88. Who was the Mr. Bole that you refer to?
A. Mr. Robert E. Bole." That is the testimony that you gave at that time? A. Yes.

Q. That is true and correct according to your then recollection? A. Yes, sir.

Q. Calling your attention now to question 103 and the answer thereto: "Q. 103. State fully what you believe with respect to the positions of Mr. Knapp and W. W. Wilson at the time of this discussion as to the 1-piece key for under-reamers. A. My impression is Mr. W. W. Wilson and Mr. Knapp were over by the door talking. What they were talking about I don't know. Understand, I was outside of the conversation between Mr. Bole and Mr. Wilson. I was not [225—167] a party to the conversation at all. Q. 104. Did you have anything to say at that time? A. No, sir. Q. Did any other person present besides Mr. Bole and Mr. E. C. Wilson have anything to say at the time of that discussion of the single-piece key, to your knowledge? A. I believe Mr. Bole, Mr. E. C. Wilson and Mr. A. G. Willard were discussing this key. Q. Do you remember anything Mr. Willard said? A. No. Q. Do you remember

(Testimony of Charles E. Wilcox.)

anything further that was said by any party than as you have testified? A. No, I do not." You gave that testimony? A. Yes, sir.

Q. And that was true and correct according to your then recollection and present recollection?

A. Yes, sir; that is to the best of my knowledge.

Q. In said deposition you were asked the following questions and gave the following answers, were you: "Q. 139. How far were Mr. Bole and Mr. Willard each from Mr. E. C. Wilson? A. Well, they

were as close as they could get—huddled around that desk. Q. The desk was two or three feet wide by about how long? A. Well, it was about three feet

long and about two feet wide. Q. Do you remember how Mr. Wilson held the sketch, or what he did with it? A. Well, when I first saw the sketch they were

all there. I believe Mr. Bole and Mr. Wilson had pencils in their hands, working there, and they kind of turned away from the desk and possibly moved a

step away from the desk. Mr. Wilson held the sketch in his hand and said, 'I know how to get it in, but I don't know how to get it out.'

Q. How far away did you stand when Mr. Wilson held this sketch in his hand? A. Well, when they moved

away from the desk, I was as close as I am to Mr. Lyon. Mr. Lyon: That is a couple of feet." Is

that a correct statement of your testimony and your recollection at that time? A. Yes, sir.

Q. "Q. 152. Did Mr. Bole at any time ever say to you that [226—168] he had made any sketch of a one-piece key for under-reamers? A. Not at that

(Testimony of Charles E. Wilcox.)

time. Q. Did he ever at any time say so—that he had made such a sketch? A. Yes, sir. Q. When did he say so the first time? A. Well, it was quite a while after that, when the reamer got out and got into use and was a better tool than the other one was. Q. What did he say at that time? A. He said that he had devised that key.” You gave that testimony and that is true? A. Yes, sir.

The COURT.—Who was this Bole?

Mr. LYON.—Q. That was the Robert E. Bole that you referred to in your last questions and answers, one of the complainants? A. Yes, sir.

Q. (By the COURT.) Was Wilson present when that conversation occurred? A. No, sir.

Q. (By Mr. LYON.) And in said deposition you were asked the following questions and gave the following answers: “Q. 192. When you heard these statements made by Mr. Bole and Mr. E. C. Wilson at the time Mr. Wilson had the sketch at the shipper’s desk, in the early part of 1911, such sketch showing the single-piece key which you have reproduced in your sketch in evidence, what was your understanding as gathered from what you saw and heard as to the use and purpose of this key? A. Well, I understood that they were going to make a reamer of this type of key. Q. And what was the key to be used for? A. To hold the tension on the spring when the reamer was to be collapsed. Q. And to be applied to what end of the spring? A. At the lower end of the spring. Q. And the key to be held where? A. In the body of the reamer and in the slot

(Testimony of Charles E. Wilcox.)

of the tee bar.” That is a true and correct statement of your testimony which you gave at that time?

A. Yes, sir. [227—169]

Q. And it was your recollection at that time?

A. Yes, sir.

Q. Q. 211: “In answer to question 111 asked you on direct examination you made a sketch which has been offered in evidence as ‘Wilson’s Exhibit Charles E. Wilcox Key Reproduction Sketch.’ Are we to understand that such sketch is the reproduction, according to your best recollection, of the sketch that Mr. E. C. Wilson had in his hand when he turned away from this shipping desk and made the remark I have just quoted and to which Mr. Bole answered, ‘Pry one end of it up and drive it out.’ A. As I remember the sketch in his hand, as near as I can remember it is what I drew on that paper. Q. 212. After Mr. Wilson had turned away from the shipping desk and made this remark and Mr. Bole had answered it in the manner referred to, did either Mr. Wilson or Mr. Bole make any addition or alteration in such sketch? A. Not to my knowledge. Q. Not while you were present? A. No, sir. Q. Up to the time that Mr. Wilson turned away from the shipping desk with this sketch and made this remark, and was so answered by Mr. Bole, as testified by you, you had paid no particular attention to the conversation carried on between Mr. E. C. Wilson, Mr. Robert E. Bole and Mr. Willard at this shipping desk, had you? A. No, not in their talk there. I was outside of their conversation altogether. Q. 215. And it is

(Testimony of Charles E. Wilcox.)

your recollection almost immediately after Mr. Wilson turned from the shipping desk with this sketch in his hand and made this remark and Mr. Bole made this answer, which you have quoted in your testimony, the three parties, Mr. E. C. Wilson, Mr. Robert E. Bole and Mr. A. G. Willard, left that part of the shop and went into the office of the shop? A. I couldn't say whether they went into the office or not. They may have moved away from there and they may have gone into the office, but I really don't know. Q. Well, it is your recollection that they did not remain there around the shipping desk or in that part of the shop after that conversation to [228—170] which you have testified? A. I really don't know. Q. Do you know whether it was Mr. Robert E. Bole or Mr. Wilson that made the sketch which he had in his hand when he turned away from the desk? A. I do not." You gave that testimony in that deposition? A. Yes, sir.

Q. And that is true, according to your best recollection then and now, is it? A. Yes, sir.

Q. "Q. 229. Did you ever hear any of the other boys say anything about it that you can remember?" That is, referring to the single-piece key and its arrangement in the Wilson under-reamer. "A. I have heard Mr. Bole say that he had devised the key quite a long time ago. Q. 230. Did he tell you at that time that some considerable time before they started to try out this key in a Wilson under-reamer he had sent in an order for a Wilson under-reamer from the north and made a sketch of single-piece key and slot-

(Testimony of Charles E. Wilcox.)

ted tee, such reamer to be sent to the Sunset-Monarch Oil Company at McKittrick? A. I don't remember whether Mr. Bole ever told me that." Did you give that testimony? A. Yes, sir.

Q. "Q. 234. Are you able to state positively without any reservation, as to the number of sketches Mr. E. C. Wilson had in his hand at the time of this conference? A. He only had one that I saw." You gave that testimony, did you? A. Yes, sir.

Q. And that was true and correct, according to your recollection? A. Yes, sir.

Q. And that is your recollection at the present time? A. Yes, sir.

Q. And what time of the day was it, according to your recollection, that this conversation to which we have been referring took place in that shop? [229—171]

A. I cannot recall now whether it was in the forenoon or afternoon. I believe I testified there that it was in the forenoon.

Q. You testified there that it was sometime between ten in the morning and two in the afternoon, didn't you?

A. That is my recollection then and now.

Q. Then, if I understand you correctly, Mr. Wilcox, you now wish to testify that you never did know and do not now know whether Mr. E. C. Wilson or Mr. Robert E. Bole made this sketch that Mr. Wilson had in his hand when they turned away from the desk and made this remark you have referred to?

A. I don't know who made the sketch.

(Testimony of Charles E. Wilcox.)

Q. You had observed Mr. A. G. Willard and Mr. E. C. Wilson and Mr. Robert E. Bole bending over this shipping desk and talking there prior to their turning away from the shipping desk with this sketch, had you? I said "observed" and not "heard."

A. Yes, sir, I seen them standing there at that desk.

Q. And it is your recollection that both Mr. Bole and Mr. Wilson had pencils in their hands at that desk at that time and when Mr. Wilson stepped back away from the desk with this sketch in his hand? Is that correct?

A. I am not positive that Mr. Bole had a pencil in his hand. It is possible that he had. I will not say that he did not have, and I will not say that he did, but I am positive that Mr. Wilson had a pencil in his hand, as he tapped the paper something like that (illustrating) with his pencil.

Q. I have read you already your testimony in the interference case, that it was your then recollection that both of them had pencils in their hands. Do you wish to change that statement now?

The COURT.—You had better read that to him again.

Q. (By Mr. LYON.) "Q. 141." I will read it. "Do you remember how Mr. Wilson held the sketch, or what he did with it? A. Well, [230—172] when I first saw the sketch they were all there. I believe Mr. Bole and Mr. Wilson had pencils in their hands, working there, and they kind of turned away

(Testimony of Charles E. Wilcox.)

from the desk and possibly moved a step away from the desk. Mr. Wilson held the sketch in his hand, and said, 'I know how to get it in but I don't know how to get it out.' " Do you wish to change that testimony now according to your present recollection?

A. To my best recollection, your Honor, Mr. Wilson had a pencil in his hand; but I don't want to be positive in regard to Mr. Bole. I half way believe that Mr. Bole had a pencil in his hand, but I won't be positive about it.

The COURT.—That is all. Go to something else.

Q. (By Mr. LYON.) Mr. Wilcox, what have been your relations with E. C. Wilson and the Wilson & Willard Manufacturing Company in their several controversies with Mr. Edward Double, one of the part owners of the Bole patent in suit, and the Union Tool Company? Is it a fact that you have an interest in pending litigation between them and such interest is that of the Wilson & Willard Manufacturing Company, and I refer particularly to the rotary suits and the rotary patents. A. Absolutely not.

Q. And at what time did you part with that interest? A. A year ago last December.

Q. And you are alleged to be one of the joint inventors with Mr. A. G. Willard of the subject matter of such rotary litigation, are you?

Mr. BLAKESLEE.—We object to that as immaterial. We will stipulate that there is a suit pending under a patent and that Mr. Wilcox is one of the inventors of it, but he has no interest in it.

A. Yes, sir.

(Testimony of Charles E. Wilcox.)

Q. (By Mr. LYON.) And at the time that you gave this testimony in this interference proceeding there was still remaining unpaid to you a large sum of money for the transfer of your alleged rights in such rotary patents to the Wilson interests, was there? [231—173]

Mr. BLAKESLEE.—Objected to as immaterial.

The COURT.—It seems to me that would be material if he had an interest at the time he gave that testimony, although he has not got that interest now.

Mr. LYON.—I want to show you that he was interested to give the most favorable testimony that he could at that time.

The COURT.—The objection is overruled.

A. What is the question?

The COURT.—The question is, did you have any financial interest in the controversy by reason of money being due at the time you gave your testimony in the interference suit.

A. There was not a dollar due me when I gave that testimony.

Q. (By Mr. LYON.) But there was money owing to you from the Wilsons at that time on account of the rotary?

A. A fractional part of the whole sum.

Q. (By the COURT.) How much?

A. A matter of \$500, I believe.

Q. (By Mr. LYON.) Is that all?

A. Yes, sir, I believe so.

Q. (By Mr. BLAKESLEE.) That was not an interest in the litigation, was it, Mr. Wilcox? You

(Testimony of Charles E. Wilcox.)

had simply sold out your interest in that patent? Isn't that it? A. Yes, sir.

Q. You had no interest in the litigation at any time? A. Absolutely none.

Q. (By Mr. LYON.) I want to ask you if the testimony that I read you that you gave in the interference, that no changes whatever were made in this sketch which Mr. Wilson had in his hand when he turned away from the shipping desk, were made after he turned away from the desk, is now your present recollection?

The COURT.—I don't understand that question.

Q. (By Mr. LYON.) In other words, is it still your present [232—174] recollection of those occurrences that no changes whatever were made in that sketch after Mr. Wilson turned away from the shipping desk?

A. No, sir; I made as near as I could from memory an absolute outline sketch of what I saw in Mr. Wilson's hand.

Q. I am not speaking of your sketch. You said Wilson had a sketch in his hand when he turned away from the shipping desk. Now, did he make any changes in that sketch after he turned away from the desk and before leaving that part of the shop?

A. Not to my knowledge, he did not.

Mr. LYON.—That is all.

Redirect Examination.

(By Mr. BLAKESLEE.)

Q. When was it that you heard Robert E. Bole assert something to the effect that he had had some-

(Testimony of Charles E. Wilcox.)

thing to do with devising this single-piece key?

A. Well, it was something along close to a year afterwards, I believe. After the reamer was quite extensively used through the different fields and was giving good satisfaction, I heard Mr. Bole make the remark that he had devised that key.

Q. That was sometime in the year 1912 then, was it?

A. That would be, yes, some time along about the first of 1912.

Q. Before this occurrence in which the discussion took place as to the prying out of this single-piece key, had Mr. Bole ever exhibited or described to you any such single-piece key as we are having under discussion at this time?

Mr. LYON.—Objected to as leading, calling for a conclusion of the witness, incompetent, and not re-direct examination.

(Discussion.)

Q. (By the COURT.) Did Mr. Bole ever show you any mechanical [233—175] device like this one in suit? A. No, sir.

Q. Or any drawing of any such thing?

A. No, sir.

Mr. BLAKESLEE.—That is all I want. Q. At the time Mr. Wilson and Mr. Bole and Mr. Willard, as you say, turned away from the desk at the shop, and you saw this sketch of the single-piece key, and heard the statements of Mr. Wilson and Mr. Bole pertinent to prying out the key, did or did not Mr. Bole have any sketch in his hand or hold it in any

(Testimony of Charles E. Wilcox.)

way so that you could see it?

Mr. LYON.—That is objected to as leading.

The COURT.—I will let him answer the question.

A. No, sir.

Mr. BLAKESLEE.—That is all.

The COURT.—I think, Mr. Blakeslee, you ought to confine yourself to proving affirmatives. Proving a negative does not establish anything.

Mr. BLAKESLEE.—That is proper excepting under circumstances of this sort where it is to be assumed that certain things would have been done had there been the possibility through existence of certain things.

The COURT.—All right, proceed. Is that all with this witness?

Mr. LYONS.—No recross. [234—176]

Mr. BLAKESLEE.—At this juncture we wish to offer in evidence a certified copy of the file-wrapper, contents and drawing in the matter of the application of Elihu C. Wilson for improvement in underreamers, being the application involved in the Interference referred to in the other certified copy offered in evidence, being the records of the Patent Office, as 'Defendants' Exhibit 10.

Mr. LYON.—We don't object to any portion of said exhibit as includes the certificate of the date of the filing of this application, or the application as filed; but we object to all of such record as is contained in any of the papers attached to such exhibit subsequent to and including the paper under date of May 5, 1913, on the ground that the same are incom-

(Testimony of Charles E. Wilcox.)

petent, irrelevant and immaterial for any purpose in this litigation. And I will state that such papers refer simply to subsequent actions by the Patent Office in their examination of the Wilson application and rejection of certain claims, and certain amendments to the application after it was filed, and to the insertion of the claims of the Bole patent for the purpose of interference, and the declaration of interference—my position being that any of those questions and papers are immaterial here, the whole object, so far as I can see, as material to this action of this patent being to prove that Wilson filed an application for a patent on this device at the time set forth in the certificate.

Mr. BLAKESLEE.—We contend that any showing of the files of an application is proper to be before the Court—not that we need rely on all those several separate papers, but that it is proper to be before the Court as disclosing the nature of that application.

The COURT.—I will overrule the objection.

Mr. BLAKESLEE.—In that connection, I call your Honor's attention to the drawing, the last paper, which will be found to agree in detail with the drawing of the patent in suit. [235—177]

Mr. LYON.—In order to have all the matter at one place in the record, I desire at this time to move to strike from the record and exclude from consideration Defendants' Exhibit 3, being the other certificate produced here, on the ground that the same is incompetent, not the best evidence, no foundation

(Testimony of Charles E. Wilcox.)

laid for the introduction of secondary evidence, incompetent and immaterial to any of the issues of this case.

The COURT.—(After discussion.) Suppose you hold these papers and defer their offer until the other papers come from the Patent Office.

Mr. BLAKESLEE.—Very well, if your Honor please. [236—178]

[Testimony of W. W. Wilson, for Defendants.]

W. W. WILSON, called on behalf of the defendants, being first duly sworn, testified as follows:

Direct Examination.

(By Mr. BLAKESLEE.)

Q. Please state your full name, age, residence and occupation, Mr. Wilson?

A. William Webster Wilson. Age, thirty-two. Residence, 1339 Fifth Avenue, Los Angeles, California. Occupation, Vice-president of the Wilson & Willard Manufacturing Company.

Q. How long have you been connected with the company?

A. Since August or September of 1908—August of 1908.

Q. What has been the nature of your duties with that company during that time from the beginning?

A. My first work there, in the summer—in July or August of 1908—was in spending a little time in repairing Mr. A. G. Willard's automobile.

The COURT.—Now, that is so trivial, Mr. Blakeslee—

(Testimony of W. W. Wilson.)

Q. (By Mr. BLAKESLEE.) All I care to know or to have is a brief statement of the nature of your services, the kind of work you did; that is, what relation you bore to the business?

A. Later on, as bookkeeper and in charge of the office routine; and later on, as superintendent of the shop; and in 1913 I was placed in as vice-president of the company.

Q. When did the Wilson & Willard Manufacturing Company first standardize, or put generally on the market, the present type of under-reamer they are manufacturing, namely, the reamer with the single-piece key?

Mr. LYON.—I think that has all been gone over.

The COURT.—Do you think it is necessary to go into that question any more, Mr. Blakeslee?

Mr. BLAKESLEE.—Possibly not. It is leading up to something else—the beginnings of his knowledge of it. [237—179]

The COURT.—Well—

A. In May, 1911.

Q. (By Mr. BLAKESLEE.) When was work commenced upon the first of these Wilson under-reamers?

Mr. LYON.—Objected to that as incompetent, no foundation laid, the witness not having qualified to answer the question.

The COURT.—He can say whether he knows or not.

Q. (By Mr. BLAKESLEE.) If you know.

A. The work was commenced on the first one of

(Testimony of W. W. Wilson.)

these reamers shortly after the conference in the Wilson & Willard Manufacturing Company's shop at which this key was discussed. That was in February of 1911.

Q. How do you fix that time?

A. From the order, which I have seen since, and also a letter, received from Mr. Williams, of the Pacific Iron Works at McKittrick.

Q. Do you remember when that letter was received?

A. Yes, sir; it was received on January 30th.

Q. Is that the letter which you now have?

A. This is the letter.

Mr. BLAKESLEE.—Let the record show that the witness picks up "Defendant's Exhibit Pacific Iron Works Letter of January 28, 1911."

Q. Did you see that letter when it came in?

A. Yes, sir; Mr. E. C. Wilson showed it to me shortly after he opened it.

Q. When did you first hear anything about such a single-piece key? A. Of this exact type?

Q. Of the general type that is built into the Wilson under-reamers as now made?

A. The first time I saw a key of this exact type, or a sketch [238—180] or any representation, was at the conference, which I believe took place on February 2d or 3d, 1911.

Q. When did you first hear of such a key?

A. When we received the order for an old style slotted tee bar from Mr. Williams, of McKittrick, my brother, Mr. E. C. Wilson, took the matter of en-

(Testimony of W. W. Wilson.)

larging the tee bar in this type of reamer up with me, and at that time we mentioned the use of a single-piece key, but of different design from that shown at the conference on February 2d or 3d.

Q. Is this the order that you refer to? (Paper shown to witness.) A. Yes, sir.

Q. As coming from the Pacific Iron Works?

A. Yes, sir.

Mr. BLAKESLEE.—Let it be shown in the record that the witness refers to Defendant's Exhibit 2.

Q. What, to your knowledge, did Mr. Wilson do in connection with reamer changes, if any, following the receipt of this letter from the Pacific Iron Works with this order?

Mr. LYON.—“With this order”?

Mr. BLAKESLEE.—And this order. I mean the two.

Mr. LYON.—Object to that question in the form which it is in, as involved, and as assuming facts not testified to by the witness, and leading. There is no testimony that following this letter E. C. Wilson did anything about reamer changes on that order.

The COURT.—Can't you ask another question, Mr. Blakeslee, and get right at it?

Mr. BLAKESLEE.—All right. Strike that out.

Q. You have testified something was shown to you or suggested to you by Mr. Wilson pertinent to a single-piece key at about the time this order was received from the Pacific Iron Works. Please tell us all that occurred, and the circumstances. [239—181]

(Testimony of W. W. Wilson.)

A. On the receipt of this order from McKittrick from Mr. Williams, the matter was taken up with me by my brother in regard to—as to whether or not it was possible that the draughtsman who made up the drawings for the old two-piece key under-reamer were as strong as they could be made. We figured the matter out in connection with the under-reamers then in use in the shop, and found that a much larger hole could be bored in the body, which would make room for a larger diameter tee bar, in which the slot would not weaken so seriously as did the old style two-piece—as did the slot in the tee bar for the old style two-piece slotted key reamer—two-piece key reamer. We then went in on the drafting board that afternoon and figured out how big we could make these, and I figured up the area of the rod that we could put into the reamer, and subtracted from this the area which would be taken out by the slot, and found that the remaining area was greater than the cross-sectional area of the tee bar then in use. So that we found we could place a tee bar in that type with a form of ample strength. Mr. E. C. Wilson then stated that that would be the reamer to make, and we both agreed that that was the reamer to make in the future, because the trouble with the old slotted tee under-reamer was the fact that the tee bar broke, giving trouble. The key matter was talked over at that time, but only indefinitely. I believe I asked Mr. Wilson as to whether he would use the—

Mr. LYON.—We object, and move to strike the

(Testimony of W. W. Wilson.)

statement from the record in which the witness says "I believe" and "I asked."

The COURT.—That goes to the weight of his testimony. I overrule the objection. Proceed.

A. (Continuing.) As I remember it, I asked Mr. Wilson whether or not he would use the same kind of a key he used in the old reamer; and he said no, he was going to get one up with a single piece. He thought it would not give the trouble of wedging against [240—182] the plug. Later on, I was going through the shop— No. The next day, I believe it was—the next day or the day following that—my brother stated that he intended to write Mr. Williams, at McKittrick, and find out his opinion as to whether a reamer using such a tee bar and such a key, which would be easily assembled and disassembled and not give the trouble that had been occasioned by the sticking of the plugs in the block and screw type—if he didn't think that that would overcome the prejudice which drillers seemed to have against the Wilson reamer. We found that drillers preferred the other type of under-reamer, although from our experience and in our observation we believe that more breakages occurred with the double under-reamer than with our under-reamer. We couldn't understand this, except from the fact that possibly the inconvenience of the plugs caused a prejudice on the part of the drillers or the men using these under-reamers. This letter was written to Mr. Williams at McKittrick, and on the 30th we

(Testimony of W. W. Wilson.)

received a reply from Mr. Williams, in which he stated that—

Mr. LYON.—We object to the witness stating the reply.

The COURT.—Yes. That is improper testimony. Objection sustained.

A. (Continuing.) —received a reply from Mr. Williams at McKittrick, which said letter was received January 30th. Two or three days subsequent to that I was passing through the shop to the shipper's desk from the office to get some information in regard to a shipment, on material received in the shop, and I believe I stopped at—I stopped and talked with Mr. Knapp a few moments about some matter that I have forgotten. Then it came to my attention that Mr. Willard, Mr. Bole and Mr. E. C. Wilson and Mr. Wilcox were standing near one of the shapers, near the back shaper in the shop, looking at an under-reamer which was lying on the floor. And so I stepped up to the conference and saw there my [241—183] brother had a sketch on one piece of paper, or several sketches on two or three pieces of paper, showing different types of keys. He was explaining that the old— He did not want to use the old two-piece key, but that he had gotten up several different designs of key that could be used in this reamer. One of them was retained by a single plug, another countersunk type plug similar to that used on the old two-piece key under-reamer. Another consisted of a plain bar of iron with a bevel at one end, with a plug at each end of the key to

(Testimony of W. W. Wilson.)

hold it in place. And the third one consisted of a bar of iron or straight piece of iron with one end beveled and the wings projecting down. These were hooks with a vertical side and an inclined side to them. He said that this one he could get into the reamer but he didn't see exactly how to get it out. And Mr. Bole stated, "Pry it out." I believe Mr. Wilcox stated, "Yes, pry it out." And the general concurrence of opinion at that time was agreed on that it could be pried out of the reamer. I asked if this key was loose in the body, and they said yes—some one said yes. And then I asked if they didn't think that the inertia in the jar in this reamer when in use might cause the key to jump up out of place and become displaced in use. Some one said that undoubtedly the pressure of the spring was too great to permit that. The topic of conversation then took the form of a discussion of the methods of prying it out, and I stepped over to the shipper's desk and got my information and I believe returned back to the office. Subsequent to this an order was gotten out, which I saw at the time in the shop, to change over an old under-reamer we had there and put in this type of key and also the enlarged tee bar as we had figured out, and the work was begun on this order. This under-reamer was finished up in the shop in this manner and was later on sold to Norbeck & Nicholson Company and shipped to [242—184] South Dakota, I believe to Redfield. We never heard any objections to this under-reamer, or heard of it, particularly, since. It was paid for by

(Testimony of W. W. Wilson.)

the Norbeck & Nicholson Company.

Q. (By Mr. BLAKESLEE.) Approximately when was it that reamer was shipped to that company?

Mr. LYON.—That is already proven, your Honor.

The COURT.—Is there any doubt about those dates?

Mr. BLAKESLEE.—I think probably not. Strike that out.

Q. You have referred to Mr. Wilcox as having said, at the time of this discussion as to prying out that key, that he suggested to pry it out. What have you to say further about that?

Mr. LYON.—We object to that as leading, and not the proper method of proof of a conversation. There isn't anything to show that the witness has not stated all that he remembers of the conversation.

The COURT.—I think probably you had better ask if he remembers anything further about it.

Q. (By Mr. BLAKESLEE.) Do you remember anything further with respect to Mr. Wilcox suggesting to pry out that key?

A. That was simply like a remark a person will make when an idea hits them and he simply agrees in the idea, and he simply said, "Yes; pry it out."

Q. (By the COURT.) Do you think Mr. Wilcox was the one that first made that suggestion?

A. No, sir. Mr. Bole was the first one that said, "Pry it out."

Q. You are sure that Mr. Wilcox was present at the time this occurred? A. Yes, sir.

Q. (By Mr. BLAKESLEE.) And where did this

(Testimony of W. W. Wilson.)

discussion about prying out this single-piece key take place?

A. It took place in the shop of the Wilson & Willard [243—185] Manufacturing Company, within eight or ten feet of the shaper furthest from the office in the shop.

Q. At which end of the shop?

A. The north end of the shop.

Q. Was there a shipping desk at that end of the shop? A. Yes, sir.

Q. How close to the shipping desk was this conference or talk?

A. About eight or ten—about ten feet, I should say.

Q. Do you remember anybody else being in the near vicinity at the time of this conference, and, if so, who?

Mr. LYON.—That is a repetition. He has stated who was there.

Q. (By Mr. BLAKESLEE.) Other than those mentioned, of course.

A. The parties changed their positions as the conference went on, and different ones pointing to an under-reamer, and so forth. I can't remember exactly the relations of the parties as they were standing there.

Q. Have you ever seen the sketch or sketches which you say your brother had at that time since that occurrence? A. No, sir.

Q. Have you since that time attempted to reproduce the sketch which you say you saw your brother

(Testimony of W. W. Wilson.)

have at that time, namely, the one as to which there was a discussion concerning prying it out, and, if so, under what circumstances?

A. Yes, sir. I produced a sketch of this kind in the interference suit.

Q. Is this it? (Showing paper to witness.)

A. Yes, sir.

Q. And what did you intend to show by that reproduction sketch?

A. This is, as I remember, the key that Mr. E. C. Wilson was explaining—the key sketch that Mr. Wilson was explaining at this [244—186] conference of February 2d or 3rd, 1911.

Q. (By the COURT.) February what date?

A. 2d or 3d, 1911.

Mr. BLAKESLEE.—We offer this reproduction sketch of the device in evidence, and ask that the same be marked “Defendant’s Exhibit W. W. Wilson Key Reproduction Exhibit.”

The COURT.—Let me see that. (Handed to Court.) Now, let me see the reproduction of Mr. Wilcox, please. (Handed to Court.)

Q. (By Mr. BLAKESLEE.) You have referred to the order that was made out for changing over an under-reamer, shortly after this conference in which the prying out of the single-piece key was discussed. Have you that order before you, or anything pertaining to it? This order, No. 6904, is the order that I refer to.

Mr. BLAKESLEE.—Let it appear that the witness refers particularly to the second sheet from the

(Testimony of W. W. Wilson.)

bottom of Defendant's Exhibit No. 7, and also to the attached order slips, sketches, etc., and to the envelopes bearing the order slips of order 6904 and 7056, being, respectively, in evidence as Defendant's Exhibits 6, 7 and 8.

Q. When did you first see that order and the particular slip thereof to which I have last referred, dated February 3, 1911?

Mr. LYON.—We don't controvert the question that that particular piece of paper was made out on the day that it is dated.

Mr. BLAKESLEE.—Very well.

Mr. LYON.—Now, what the witness' knowledge or recollection of it at the present time is, with reference to the paper, has not been shown, and I don't see as his testimony is material or competent, and there is no foundation laid showing that he has any recollection.

Mr. BLAKESLEE.—With the admission, we will withdraw the question. [245—187]

Q. What do you know as to the work performed in the shop of the Wilson & Willard Manufacturing Company in connection with this order 6094 and the associated order 7056?

A. This work was carried out in the shop of the company as requested on the order, this being to bore out the under-reamer body to the larger bore, make up a special spring and special tee bar to fit this under-reamer. This under-reamer was an old-style reamer and had to be remilled to take the new style of cutters, also.

(Testimony of W. W. Wilson.)

Q. Do you know who had charge of this work?

Mr. LYON.—There is no controversy with regard to that—that Mr. Knapp was the foreman of the shop and he had charge of the work.

Mr. BLAKESLEE.—All right.

Q. Who else, to your knowledge, did any work on that reamer?

Mr. LYON.—I object to that, on the ground that it is incompetent, and no foundation laid.

The COURT.—I don't see that it makes any difference who worked on it.

Mr. BLAKESLEE.—I am going to follow that up by asking if he knows of any instructions other than given by Mr. Wilson.

Mr. LYON.—Another negative.

The COURT.—It seems to me like it is a negative.

Q. (By Mr. BLAKESLEE.) Do you know who gave all of the instructions for the execution of this order?

Mr. LYON.—That is incompetent, no foundation laid.

The COURT.—I think he has testified he gave them. Now, is there going to be any controversy about that?

Mr. BLAKESLEE.—That he gave an order. I want to know if there were any other instructions. Complainant will try to show some other instructions were given by somebody else. [246—188]

Q. (By the COURT.) Did your brother give all the orders in regard to the construction of this reamer? A. Yes, sir.

(Testimony of W. W. Wilson.)

Q. (By Mr. BLAKESLEE.) Did you see that reamer assembled, after the work on its various parts had been finished, with the key in place?

A. Yes, sir.

Q. And did you see the reamer disassembled and the key removed after the parts had first been put together? A. Yes, sir.

Q. How was that done?

A. I was sitting in the office one day and Mr. Knapp came into the office and got myself and Mr. E. C. Wilson and told us to come out into the shop and look at that reamer. He said we didn't need a lever to pry it out. So, we went out into the shop, and Mr. Houriet, who was working on the under-reamer, had found that—and he did at that time put the under-reamer together, and then, with the tang of a file, drove it under one edge of the key and pried it up. He was then unable to pull the file out and leave that key with the prong sticking up on the edge or corner of the bore; and then he was able to drive the key out the other side. That is the way he dismantled the reamer at that time.

Q. What lever did you refer to in your last answer as being not necessary to be used?

A. The lever that was made on this order, for removing the key or prying it out.

Q. Is this the same general conformation of lever as that one? A. Yes, sir.

Mr. BLAKESLEE.—Let it be shown in the record that the witness has been referring to Defendant's Exhibit 9.

(Testimony of W. W. Wilson.)

Q. When did you first see such a lever at that shop?

The COURT.—I don't see any necessity of asking that. [247—189]

Mr. BLAKESLEE.—There will be a contention raised by the complainants that this was devised by one of the complainants.

The COURT.—That is not the device in controversy?

Mr. BLAKESLEE.—No, sir; but it will be attempted to be shown to this Court that such a lever was devised by the other side, and that that was very important in handling this tee.

The COURT.—All right.

A. On that day. I think at that time.

Q. (By the COURT.) Was that the first time you saw it? A. Yes, sir.

Q. (By Mr. BLAKESLEE.) This lever?

A. Yes, sir.

Q. And do you know what its use was in the shop, or what it was made for?

A. We had a lever similar to that previously which we had used to put in a slot in the side of the under-reamer body and pry the lock up into place so that we could put the screws in the side of the body so that the holes would match, so that the screw would fit into the block.

Q. How did that differ in design from this lever?

A. Merely a sharpening of the point, as I remember.

Q. The same general contour?

(Testimony of W. W. Wilson.)

A. The contour of the rest of it was the same.

Mr. BLAKESLEE.—We now offer in evidence this piece of metal as Defendants Exhibit 9.

The COURT.—I thought that was already in evidence.

Mr. BLAKESLEE.—No. It was only marked 9 for identification.

The COURT.—All right.

Q. (By Mr. BLAKESLEE.) Can you state when it was that this key-removing operation took place by the assistance of Mr. Houriet with the file end?
[248—190]

A. It was some time prior to the completion of this under-reamer, due to the fact that we found the spring was weak and also there was some other changes in the fit of the tee bar, I believe, which were made subsequent to that. We also made three springs, instead of one, changing the shape of it and size of the spring steel so as to give more strength.

Q. Can you state when the several parts of this reamer 120 as reshaped and redesigned, and provided for organization including the single-piece key, were completed so that such reassemblage was possible?

Mr. LYON.—I object to that, on the ground that it is incompetent, the witness not having qualified to answer the question.

I would like to ask the witness this question—if he has any recollection of those dates independently of these time-sheets?

A. I have the sequence of events in my mind. The

(Testimony of W. W. Wilson.)

only way I could establish the actual dates, as to whether it was prior to this event or subsequent to some event is by locating the date from these sheets.

Q. (By Mr. BLAKESLEE.) In other words, you associate these things with other things that you knew about? Is that it?

A. Yes, sir.

Adjourned until 2 o'clock P. M. [249—191]

Thursday, March 25, 1915, 2 o'clock P. M.

W. W. WILSON, recalled.

Direct Examination (Resumed).

(By Mr. BLAKESLEE.)

Q. Can you state, Mr. Wilson, when reamer 120 was first assembled with the single-piece key?

A. Somewhere very soon after; about the same day the last work was done on the tee bar.

Q. When was that, if you know?

A. I couldn't tell, without referring to the cards.

Q. (By Mr. LYON.) You have no recollection of the date or of that particular work except as given on these cards, have you?

A. No, sir.

Q. (By Mr. BLAKESLEE.) After the reamer was first assembled and prior to its shipment to the Norbeck & Nicholson Company, what do you know of its history?

A. It was assembled and disassembled a good many times, first in the blacksmith-shop; there were several changes made on it in different parts of it, particularly did they have trouble with the spring due to the fact that we had increased the diameter of the spring

(Testimony of W. W. Wilson.)

and we had to make the spring of heavier stock to get the same strength on the cutters, and I remember three distinct springs were made for the reamer. And other changes and fitting was done to the reamer that I am unable to remember right now as to what they were, prior to the time the reamer was completed. It then stood on a pair of horses in the blacksmith-shop where parties coming into the shop interested in under-reamers were taken to the blacksmith-shop, and it was taken apart and shown them—taken apart and [250—192] assembled again—to show them the construction and ease of assembling and disassembling—and where it remained until just prior to its sale; and, as I remember, it was tempered then prior to its shipment, when it was sent to the Norbeck & Nicholson Company.

Q. How long have you known Mr. Bole, the complainant?

A. Since 1904 or five when he was working in the Bakersfield Iron Works.

Q. Were the 2-piece key reamers manufactured there at that time to your knowledge?

A.. They were manufactured at the Bakersfield Iron Works in either 1906 or 1907, or both.

Q. I show you "Defendant's Exhibit Photo 'A' of Wilson Reamer, 2-piece Key Device," and "Defendant's Exhibit Photo 'B' of 2-piece Key Device," and ask you whether or not those typify the general construction of the—

The COURT.—I understand that plaintiff has admitted those photographs as correct photographs.

(Testimony of W. W. Wilson.)

Mr. LYON.—Yes, we do not question that.

The COURT.—I don't see the necessity of taking up the time of the Court with that.

Mr. BLAKESLEE.—I simply wish to show that Mr. Bole knew of the construction at that time.

Mr. LYON.—You have already proven that, and it is admitted.

Q. (By Mr. BLAKESLEE.) Do you know whether or not Mr. Bole was familiar with the type of 2-piece key construction at the Bakersfield shop?

A. He worked at the shop at the time it was constructed there. As to actually whether he was acquainted with it or not, I am unable to state.

Q. Was Mr. Bole at the shop of the Wilson & Willard Manufacturing Company, the defendant, during the years 1911 and 1912?

A. Yes, sir. [251—193]

Q. How much of the time was he in attendance at that shop?

A. He was in attendance almost every day except when he was out of the city. At least two or three hours of the day. And part of the time or a good deal of the time he was there all the time. That is, during the working hours of the day.

Q. To what parts of the premises did he have access? A. To all parts.

Q. Including the office as well as the shop?

Mr. LYON.—What is the object of that line of testimony? We can probably stipulate it. I want to save time here.

Mr. BLAKESLEE.—The object is to show that he

(Testimony of W. W. Wilson.)

was in close touch with all the business of that company.

The COURT.—Bole was?

Mr. BLAKESLEE.—Bole was. That Bole was in close touch and had access to the office and all its files and papers, and was in close personal relation with all the officers of that company.

The COURT.—Do you stipulate that that is a fact?

Mr. LYON.—Yes.

The COURT.—Then proceed with something else.

Mr. LYON.—That is, during 1911.

Mr. BLAKESLEE.—And during 1912.

Mr. LYON.—Not all of 1912, no.

Mr. BLAKESLEE.—How much of the time do you wish to except in 1912?

Mr. LYON.—He was in and out through the shop up to the latter part of 1912, anyway, and probably all of it, but I will not stipulate that he had any access to their general office files, if that is what counsel intends. So far as what they were doing along the line of building devices, he had full, free access to all of the shop, being part of the shop and running one department of it.

Mr. BLAKESLEE.—Then I wish to examine the witness as to [252—194] whether he had access to the files such as those which pertain to the shop orders.

Q. (By the COURT.) Was Mr. Wilson in charge of those files?

Q. (By Mr. BLAKESLEE.) You were in charge

(Testimony of W. W. Wilson.)
of the office generally at that time?

A. Yes, sir.

Q. What can you say as to Mr. Bole's access to the files of shop orders, records and the like, during those years?

A. No restraint was exerted on Mr. Bole in regard to that. He had free access to all the files, if he wanted to look at them.

Mr. LYON.—I move to strike out the answer from the record as being a conclusion. It don't state what he had, but simply shows what he was not prohibited from having.

The COURT.—I will deny the motion.

Q. (By Mr. BLAKESLEE.) Was there any particular line of work that Mr. Bole was interested in in the shop during those years?

A. Yes, sir; he was having his Bole pumps manufactured there.

Q. And when did that work come to an end there?

Mr. LYON.—That has already been proven. There is no contest about that.

Mr. BLAKESLEE.—I wish to lay a foundation for the settlement of their affairs, and the attendant circumstances which the witness E. C. Wilson testified about.

Mr. LYON.—I understand that the only reason for admitting any portion of that was simply as such alleged conversations might point to what was said at that time to indicate any statement that either of the parties made as to who was the inventor, and the Court has ruled that the defendant cannot change,

(Testimony of W. W. Wilson.)

alter, vary or modify the terms of the written agreement, or attack that collaterally by contemporaneous parol agreement.

The COURT.—What have you to say about that, Mr. Blakeslee? [253—195]

(Discussion.)

The COURT.—Ask him what conversation he heard. Tell what conversation you heard between Mr. Bole and Mr. Wilson.

Mr. BLAKESLEE.—I was simply fixing the time, was all.

A. The pump business came to an end sometime in January, 1913, when an attachment was placed on the Bole Pump Company's account and business and material. This attachment was released by a session at the Wilson & Willard Manufacturing Company's shop on the morning of February 1, 1913.

Q. At that time was there any conversation in which you participated concerning this single-piece key matter? A. Yes, sir.

Q. Please repeat such conversation in as nearly the words thereof as you can give it.

Mr. LYON.—That the record may be clear, I have stated my understanding of the ruling of the Court, and I don't care to encumber the record with an objection, if my understanding of the ruling of the Court is correct that that conversation is not admitted for the purpose of showing any contemporaneous oral agreement, but solely to get the words of the conversation for any bearing it may have upon the question of who was the inventor—

(Testimony of W. W. Wilson.)

The COURT.—That is the ruling of the Court. Go ahead and state the conversation.

A. There was an argument over the different points in regard to the manner of settling up the account, and having in mind a certain letter received during the month of January, 1913, by Mr. E. C. Wilson or the Wilson & Willard Manufacturing Company. I was sitting at my desk in our office there, and my brother was sitting at the desk across the room and I turned to him and said, “Clem, how about this key proposition?” [254—196]

The COURT.—Who is Clem?

A. My brother, E. C. Wilson.

The COURT.—All right; go ahead.

A. He turned to Mr. Bole and said, “Yes, Bob, how about that key matter?”

Q. (By the COURT.) Is Mr. Bole’s name Bob?

A. Yes, sir.

The COURT.—All right.

A. Mr. Bole said, “You needn’t worry about that; I will do nothing further with it.” And Mr. Wilson says, “We will remember that.”

Q. (By the COURT.) Had this writing been signed at that time?

A. No, sir.

Q. Had it been dictated?

A. At least part of it had been dictated. I am not certain whether all of it had been dictated, or not.

Q. Had it been read over by the parties?

A. I think they were reading it at the time.

The COURT.—Go ahead, Mr. Blakeslee.

(Testimony of W. W. Wilson.)

Mr. BLAKESLEE.—I believe your Honor has intimated that questions directed at determining whether or not witnesses had received any information of this key from Bole or not, is tending to establish negative proof. I wish to ask one further question along that line, if your Honor will permit. Our contention is that when these parties were so closely related to daily attendance in the shop, it is competent to show whether or not there had been any putting of this information up by anybody in connection with Mr. Wilson as to Mr. Bole's claim of having produced this thing before, or contention that he had before. And it is proper to show that in connection with establishing the surrounding circumstances.

The COURT.—I don't think so.

Mr. BLAKESLEE.—In an inquiry of this sort?

The COURT.—No. [255—197]

Mr. BLAKESLEE.—Doesn't it tend to show the probability or improbability of any claim as to origination by Bole?

The COURT.—No.

Mr. BLAKESLEE.—We wish to make that proof, if we might, and we have other witnesses whom we will call along that line, unless your Honor rules—

The COURT.—I have ruled that it will have no effect on the Court. If you brought in everybody in Los Angeles and they testified that they never heard Mr. Bole say anything about it, that is negative testimony that does not amount to anything. I illustrated it in my reference to bringing in witnesses to

(Testimony of W. W. Wilson.)

testify that they never saw a man shoot another one. That would not be evidence that another person did not shoot him.

Mr. BLAKESLEE.—But we don't intend to go outside the shop of the Wilson & Willard Manufacturing Company and take in scattering citizens throughout the city. Our intention is to show merely as to those persons in daily contact with Bole and Wilson.

The COURT.—Do you object to it, Mr. Lyon?

Mr. LYON.—Certainly.

The COURT.—All right. The objection is sustained.

Cross-examination.

(By Mr. LYON.)

Q. You testified in the interference proceeding No. 37,126, did you, in behalf of your brother, E. C. Wilson? A. Yes, sir.

Q. I call your attention to question 400 asked you on cross-examination, which question is as follows:

The COURT.—Let the witness see it.

Mr. LYON.—I have it in front of him. "Q. 400. You have referred to a settlement with Mr. Bole by the Wilson & Willard Manufacturing Company on or about February 1, 1913. Was such settlement in writing? A. Not to my knowledge. A receipt was given [256—198] to Mr. Bole for a payment which he made at that time."

A. Yes, sir; that was my testimony at that time.

Q. That was your recollection of the facts at the time of giving that testimony, was it? You may ex-

(Testimony of W. W. Wilson.)

plain afterwards. A. Yes, sir.

Q. And you were afterwards confronted with the contract of February 1, 1913, and asked if your signature was appended thereto as a witness?

A. Yes, sir.

Q. In your testimony in said interference were you asked the following question and did you give the following answer: "Q. 291. Is there any way in which you can fix this date definitely?" That is, when the under-reamer No. 120 was first reassembled with the 1-piece key therein.

The COURT.—Is that part of the question?

Mr. LYON.—No, that is an interpolation, and the witness may look at the record to see whether that is the subject of the question. Your answer was, "This reamer was probably first assembled in the early part of March, from my inspection of the time-cards, but I am not able to definitely settle this point."

A. Yes, sir; that was my answer.

Q. And that was your recollection at the time of giving that deposition on June 22, 1914, was it?

A. Yes, sir.

Q. Were you asked the following questions and did you give the following answers in that deposition: "Q. 346. Were you present at the commencement of this conference between Mr. E. C. Wilson, Mr. A. G. Willard, Mr. C. E. Wilcox, to which you have last referred? A. I don't know that I was. I came along after the conference was started. I don't know whether that was the first of it or not. Q. 347. Are we to understand from your testimony that the

(Testimony of W. W. Wilson.)

joining of you into such conference was by accident as [257—199] you happened to pass through the shop? A. I believe so. I was not invited into the conference."

A. That was my testimony; yes, sir.

Q. Now, referring to this sketch that you stated Mr. Wilson had in his hand at the time that Mr. E. C. Wilson, Mr. A. G. Willard and Mr. Robert E. Bole and Mr C. E. Wilcox were standing over this reamer, in relation to that sketch, were you asked the following question and did you give the following answer on such deposition: "Q. 367. This sketch was not made while you were present at that conference, was it? A. I believe the sketch was partially made, or a sketch was made during the conference, alterations were made in the sketch by Mr. Wilson."

A. Yes, sir; that is my testimony.

Q. "Q. 368. What part of it? A. Certain alterations were made in the sketch by Mr. Wilson. Q. 369. What alterations? Describe them. A. Alterations in the shape of the downward projection of the key. Q. 370. What did the sketch show prior to these alterations in regard to the downward projection of the key? Please describe the formation. A. As I remember the key sketch, first it showed simply a hook projecting downward, similar to the hook on the lower piece of key in the old 2-piece key type. To this another hook was added and the shape of these hooks was altered. Q. 371. When was the second hook added to this sketch? A. During the conversation, prior to the remarks, as I remember it,

(Testimony of W. W. Wilson.)

or during the remarks of Mr. Wilson, that he could hold the key in place by means of these, and that he could get it into the under-reamer, but that he didn't know how to get it out exactly. Q. 372. And who was present while those alterations were being made in that sketch? A. Mr. E. C. Wilson, Mr. A. G. Willard, Mr. R. E. Bole, myself, and C. E. Wilcox, and I believe Mr. William G. Knapp. I am not certain as to Mr. Knapp." Is that correct?

A. Yes, sir. [258—200]

Q. That is a correct statement of your testimony as given in that deposition at that time?

A. Yes, sir.

Q. Referring still to this sketch that we have been discussing, did you in that deposition also testify as follows in answer to question 394, referring to your brother: "Did he have more than one piece of paper in his hand at that time? A. No, sir.

Q. Are you sure it was not a piece of tracing paper that he had in his hand at that time?

A. No, sir; because he was sketching on it with a lead pencil."

A. No; with a pencil.

Q. "—with a pencil." Leave out the lead. "Q. 396. Was there more than one sketch of a key on this piece of paper at the time that you joined this conversation and saw Mr. Willard and Mr. Wilcox and Mr. E. C. Wilson and Mr. Bole bending over the under-reamer body? A. Yes, sir; there were two or three or four sketches of different shapes of keys, as I remember. However, the conversation was more

(Testimony of W. W. Wilson.)

particularly directed at one." Is that a correct statement of your testimony as given at that time?

A. Yes, sir.

Q. When you gave your deposition in this interference proceeding, did you then recollect who it was or when it was that it was discovered that this single-piece key could be removed from reamer No. 120 as reassembled, by driving under such key the tang end of a file?

A. Yes, sir; I think I remember it, and I believe I testified so in that case.

Q. Did you name the man?

A. I don't remember whether I did or not. I could have.

Q. Please tell us again when it was that this man Houriet made that discovery.

A. It was very shortly after the under-reamer was assembled [259—201] the first time. That is, I think—I don't believe I saw him assemble that or disassemble it the first time or so. It was only two or three or four days, or something like that, after the under-reamer was completed, or ready to assemble the first time, that we were called out to that conference. That is the first I knew about it.

Q. According to your present recollection, when would that have made the date of such occurrence?

A. The early part of March, 1911.

Q. When you say the early part of March, would you say it was prior or subsequent to the 8th day of March, 1911, that this discovery was made by Mr. Houriet?

A. I am unable to state.

(Testimony of W. W. Wilson.)

Q. You have been in the courtroom all of the time during the taking of the testimony of your brother E. C. Wilson in this case, haven't you?

A. I believe so; yes, sir.

Q. You heard his testimony that it was two or three weeks after the reamer was first assembled before Mr. Houriet made this discovery?

A. Yes, sir.

Q. What have you to say as to how that corresponds with your present recollection of such fact? That may be argumentative, your Honor, but I want to give him a full opportunity to explain.

A. It seems to me it was earlier than that. It was probably not more than a week after the reamer was first assembled.

Q. (By the COURT.) What time do you fix as the date of final completion of this reamer 120, the assembling of it?

A. The under-reamer was assembled a number of times. The final assembling of it was just prior to the shipping to Bakersfield.

The COURT.—I know. But I want the time that it was assembled. [260—202]

A. As near as I can fix that date it was the last few days of February or first of March, 1911.

Mr. LYON.—That is all.

Redirect Examination.

Mr. BLAKESLEE.—May I ask one more question of the witness which is not redirect?

The COURT.—Yes.

Q. (By Mr. BLAKESLEE.) I show you two

(Testimony of W. W. Wilson.)

tracings and ask you if you know what they are.

A. Yes, sir.

Mr. LYON.—I think that matter has all been fully gone over and they are offered in evidence.

The COURT.—I suppose he wants to ask something about it.

Q. (By Mr. BLAKESLEE.) When did you first see these?

A. I believe I saw these tracings just after they were completed, if not while in the process of being traced.

Mr. LYON.—I move to strike the answer from the record and exclude it from consideration on the ground that it is merely the guess or belief of the witness, and incompetent.

The COURT.—Overruled.

Q. (By Mr. BLAKESLEE.) When was that?

A. That was May 6, 1911.

Q. (By the COURT.) Do you know anything about it excepting that date that is printed on there?

A. No, sir; nothing excepting the date.

Q. (By Mr. BLAKESLEE.) And at the time you first saw that was this part marked "drive-key steel" on that tracing?

Mr. LYON.—Objected to as incompetent and no foundation laid.

A. Yes, sir.

Mr. BLAKESLEE.—Let it be shown that the witness has just referred [261—203] to "Defendant's Exhibit 4" and "Defendant's Exhibit 5."

Mr. BLAKESLEE.—That is all. [262—204]

[Testimony of A. G. Willard, for Defendants.]

A. G. WILLARD, a witness produced on behalf of defendants, being first duly sworn, testified as follows:

Direct Examination.

(By Mr. BLAKESLEE.)

Q. Please state your full name, age, residence and occupation.

A. My name is Arthur G. Willard; I live at 1246 West Thirty-seventh Place.

Q. Los Angeles?

A. Los Angeles, California. I am at present engaged in the business of looking after my interests.

Q. Age? A. Age, forty-four years.

Q. You have been at one time interested in the defendant corporation of the Wilson & Willard Manufacturing Company? A. Yes, sir.

Q. During what period of years?

A. From July, 1907, to April 1, 1913.

Q. Have you any interest in that corporation whatsoever at the present time? A. No, sir.

Q. Are you acquainted with that type of Wilson under-reamer which is now being produced by that company, including the single-piece key for confining the lower end of the spring like "Defendant's Exhibit 1," before us here? A. Yes, sir.

Q. When did the Wilson & Willard Manufacturing Company make the first of such reamers to your knowledge?

A. Sometime in the early part of 1911.

(Testimony of A. G. Willard.)

Q. When did you first hear of such a single-piece key? A. About the same time.

Q. Under what circumstances? [263—205]

A. The key was manufactured in the shop of the Wilson & Willard Manufacturing Company.

Q. Were any other changes made in the Wilson under-reamer at that time?

A. The tee bar was made a little larger and heavier.

Q. Can you fix in any manner the time and tell us the circumstances under which such tee bar changes were made?

A. About the time we received a letter from a man named Williams at McKittrick.

Q. Is the letter before you?

A. Yes, sir; this is it.

Q. Did you see this letter when it came into the shop?

A. I saw the letter after it came into the shop; yes, sir.

Q. How soon after?

A. Possibly the same afternoon or the next day.

Mr. BLAKESLEE.—Let it be shown that the witness has just selected "Defendant's Exhibit Pacific Iron Works Letter of January 28, 1911."

Q. Can you tell us anything further as to anything that occurred in connection with such modification of the Wilson reamer at about the time that this letter came in?

A. Why, Mr. Wilson called my attention to the fact that Williams had ordered an old-style tee bar,

(Testimony of A. G. Willard.)

and to the best of my recollection Mr. Wilson said at the time, "Is it possible that one of those old tee bars is in use, and can it be possible to make the old style tee bar heavier?" or words to that effect.

Q. Was anything done by Mr. Wilson at that time in connection with changing over this tee bar, and, if so, what?

A. Mr. Wilson started to work immediately sketching out an extra heavy tee bar.

Q. Where did he do this?

A. On the draughting board in the office. [264—206]

Q. Did anybody assist him in that work or advise him? A. I can't say.

Q. Did you see him doing this draughting-board work?

A. I was there part of the time; yes, sir.

Q. How soon after that was it that you first heard of this single-piece key?

Mr. LYON.—We object to that on the ground that it is leading and assumes facts not testified to by the witness, that it was after that that he first heard of the key.

The COURT.—The objection is overruled. I don't understand it that way.

Mr. LYON.—The witness has not stated that that was the first time that he heard of that key.

(The question is read.)

The COURT.—After what do you mean?

Mr. BLAKESLEE.—After the time of this draughting-board work.

(Testimony of A. G. Willard.)

The COURT.—I think that is all right. He may have heard of that before, but he asks when was the first time he heard of that after that time. The question is all right.

A. Inside of the next thirty days, I would say.

Q. (By Mr. BLAKESLEE.) Who first mentioned such single-piece key device to you, or put it up to you in any way? A. I don't remember.

Q. And where did you first see such single-piece key device?

A. In the shop of the Wilson & Willard Manufacturing Company.

Q. Where did you first see any sketch or pictorial showing of any such single-piece key device?

Mr. LYON.—Objected to on the ground that it is leading, and that the witness has not yet testified that he ever saw a sketch.

The COURT.—I will overrule the objection.

A. I saw a blue-print of the single-piece key in the office of the Wilson & Willard Manufacturing Company. [265—207]

Q. (By Mr. BLAKESLEE.) Had you ever seen any sketch or showing on paper of such key before?

Mr. LYON.—Objected to as leading.

A. Not to my best recollection; no, sir.

Q. (By Mr. BLAKESLEE.) And when was this that you say such blue-print?

A. In the early part of 1911.

Q. At that time had you ever seen any written description of any such single-piece key device?

The COURT.—Now, Mr. Blakeslee, if you are in-

(Testimony of A. G. Willard.)

tending to prove a negative, I don't want you to do it. It has been ruled out.

Mr. BLAKESLEE.—I apologize. I contravened your ruling, but I did not mean to.

Q. In what connection did you see such first showing on paper of the single-piece key device on the blue-print?

A. I have no recollection of the time, except that I remember distinctly of seeing a blue-print with a single-piece key on it in the shop, or, rather, in the office of the shop.

Q. And with relation to that time when was it that you first saw a Wilson reamer with such a single-piece key device?

A. I cannot state positively. I may have seen the reamer along about the same time, and it is not clear in my mind at all.

Q. And you are sure that that was after the first of 1911? A. Yes, sir.

Mr. BLAKESLEE.—That is all.

Cross-examination.

(By Mr. LYON.)

Q. How long have you been acquainted with Mr. Robert E. Bole? A. A long time, Mr. Lyon.

Q. You knew him in the fall of 1908?

A. Yes, sir. [266—208]

Q. Where was he employed at that time?

A. At the shop of the Wilson & Willard Manufacturing Company.

Q. At Los Angeles, California? A. Yes, sir.

Q. You were in charge of that shop at that time?

(Testimony of A. G. Willard.)

A. Yes, sir.

Q. Where was Mr. E. C. Wilson at that time?

A. He was living at Bakersfield, California.

Q. In September, 1908, Mr. Bole went north to Maricopa, California, the oil fields, did he?

A. Yes, sir.

Mr. BLAKESLEE.—Objected to as not cross-examination. It is immaterial.

The COURT.—It seems to me it is not in the line of cross-examination.

Mr. BLAKESLEE.—Counsel is trying to make out his case in rebuttal.

Mr. LYON.—I want to show the contradictory character of this witness, and also he has stated that the first time that he heard of this key was in 1911. I want to show before I get through with him that he saw and heard of it in 1908.

The COURT.—Go ahead. With that explanation it is evident that it is perfectly proper.

Q. (By Mr. LYON.) For what purpose did Mr. Bole go north in September, 1908?

A. One of his trips he went north to take charge of the Sunset-Monarch shops.

Q. He went up there along the 17th, 18th, 19th or 20th of September, 1908. Is that correct?

A. Somewheres around that time, I believe.

Q. While he was up there he sent down an order to the Wilson & Willard Manufacturing Company for a $9\frac{5}{8}$ Wilson under-reamer [267—209] and a Bole casing spear, did he?

A. Yes, sir; and some Bole pumps.

(Testimony of A. G. Willard.)

Q. That order was in writing? A. Yes, sir.

Q. And in that written order there were suggested changes of the Wilson under-reamer, were there?

A. Yes, sir.

Q. And the suggested changes referred to the key device for holding the tee bar or spring-actuated rod in place, did they?

A. Not to the best of my recollection.

Q. Do you know what became of that written order? A. No, sir.

Q. You testified in the interference proceeding No. 37126 on behalf of Mr. E. C. Wilson, did you?

A. Yes, sir.

Q. I show you a copy of your testimony in that case—I think it is a signed copy, Mr. Willard—and I ask you to read the same and state whether or not it is a true copy of your testimony in that case. And you gave two depositions in that case, didn't you?

A. Yes, sir.

Mr. LYON.—I am going to offer the entire two depositions for impeachment purposes in this case, and I am not going to stop to read the testimony at the present time unless your Honor desires. I will read it in argument.

Mr. BLAKESLEE.—We don't object.

Mr. LYON.—Will you stipulate that that is a true copy of the testimony he gave?

Mr. BLAKESLEE.—I don't know what it is.

Mr. LYON.—It is a signed copy of the testimony given me by Mr. Benjamin. Anyway, you can read it over. [268—210]

(Testimony of A. G. Willard.)

The COURT.—How long is it?

Mr. BLAKESLEE.—Probably a hundred pages.

Mr. LYON.—No, about 50 pages of it.

The COURT.—If you want him to read it over you can have him take the time outside. There is no use taking up the time of the Court for him to read it over to see that this is his testimony.

Mr. BLAKESLEE.—We will agree to that, subject to correction in the event of any error.

The COURT.—Certified by Mr. Benjamin?

Mr. BLAKESLEE.—Yes, but this is not the original. We will take it subject to the stipulation that it is subject to correction.

Mr. LYON.—We will accept that. The reporters will copy into the record at this point the entire two depositions of Mr. Willard.

The depositions last referred to are as follows:
[269—211]

[Deposition of Arthur G. Willard, for Defendants.]

ARTHUR G. WILLARD, a witness produced on behalf of the party Wilson, being first duly sworn, deposes as follows:

Direct Examination.

(By Mr. BLAKESLEE.)

Q. 1. Please state your full name, age, residence and occupation.

A. Arthur G. Willard; forty-three years of age; machinist by occupation; 1246 West Thirty-seventh Place, Los Angeles, California.

Q. 2. In what line of work are you at present busy? A. Building.

(Deposition of Arthur G. Willard.)

Q. 3. What has been your activity during the last ten years, in what lines of work?

A. Manufacturing oil well tools.

Q. 4. When did you commence to manufacture oil well tools? A. 1899.

Q. 5. What was the name of the business you were running during those years, the name or names of the business you were running during those years?

A. Baker Iron Works; Bakersfield Iron Works at Bakersfield; and the Wilson & Willard Manufacturing Company at Los Angeles, Cal.

Q. 6. Did you have any interest in either of these concerns?

A. Part owner in the Wilson & Willard Manufacturing Company.

Q. 7. How long were you a part owner in that company? A. Between five and six years.

Q. 8. When was that company organized?

A. July, 1907.

Q. 9. When did it start business?

A. Some two or three months later.

Q. 10. At what place?

A. At 1520 Santa Fe Avenue, Los Angeles, California. [270—212]

Q. 11. Is that concern still operating?

A. Yes, sir.

Q. 12. Where?

A. Fifteenth and Santa Fe Avenue.

Q. 13. Has it always been operating in the City of Los Angeles, California, since it started up?

A. Yes, sir.

(Deposition of Arthur G. Willard.)

Q. 14. What was your connection with the business of that company from time to time?

A. Vice-president and treasurer.

Q. 15. Did you always hold that office?

A. Yes, sir.

Q. 16. What did you have to do, if anything, with the business of the concerns, so far as its management and the conduct was concerned?

A. I looked after the shop end of it, principally.

Q. 17. During what years?

A. 1907 to—the latter part of 1907 to the first part of 1913.

Q. 18. What was the general business of the Wilson & Willard Manufacturing Company during the time you were connected with it?

A. Manufacturing oil well tools.

Q. 19. Please name such oil well tools, or a few of the principal ones.

A. The Wilson under-reamer, the Wilson casing spear, the Wilson casing elevator, Bole pumps, Baker casing shoes, Schweitzer swivel sockets, Willard circulating-heads, and the Willard & Wilcox rotary drive.

Q. 20. What significance does the name "Bole" bear in speaking of pumps?

A. The pump patented by R. E. Bole.

Q. 21. Who is that R. E. Bole? Please identify him. [271—213]

A. He is now conducting the business known as the Bole Pump Company on Santa Fe Avenue in Vernon.

Q. 22. How long have you known Mr. Bole?

(Deposition of Arthur G. Willard.)

A. Eight or nine years.

Q. 23. He is present in the room at this time?

A. Yes, sir.

Q. 24. A party to these proceedings?

A. So I understand.

Q. 25. You have spoken of the Wilson under-reamer. What does the name "Wilson" mean in that connection?

A. The under-reamer was patented by E. C. Wilson.

Q. 26. He is a party to these proceedings and present in the room? A. Yes, sir.

Q. 27. How long have you known Mr. Wilson?

A. Oh, possibly fifteen years.

Q. 28. What had his business been during the last few years?

A. He was connected with the Baker Iron Works for a number of years, and left to take charge of the Bakersfield Iron Works at Bakersfield, California; and afterwards came to Los Angeles, California, with the Wilson & Willard Manufacturing Company.

Q. 29. What was his office and what were his duties in connection with the Wilson & Willard Manufacturing Company?

A. He was president of the Wilson & Willard Manufacturing Company and had charge of the office work, and general manager.

Q. 30. During what period of time did he pursue these duties and occupy these offices?

A. 1908 up to the present time.

Q. 31. Who else, if anyone, was associated with yourself and Mr. E. C. Wilson in the management and

(Deposition of Arthur G. Willard.)

operation of the Wilson & Willard Manufacturing Company from the year 1907 or 1908 until the middle of last year? [272—214]

A. No one as stockholder, excepting Mrs. Willard.

Q. 32. What other persons, if any, helped conduct that business?

A. Mr. W. W. Wilson was connected with the firm since 1908.

Q. 33. What were his general duties from time to time?

A. He had charge of the office work until the arrival of Mr. E. C. Wilson.

Q. 34. What year was that?

A. I think it was 1908.

Q. 35. What were Mr. W. W. Wilson's duties from that time on? A. Beg pardon?

Q. 36. During what years?

A. Part of 1908, 1909, 1910 and possibly part of 1911.

Q. 37. After that what were his duties in that business? A. Acted as superintendent.

Q. 38. Who was foreman of that shop for the last four or five years?

A. There were two different foremen, S. G. Topliff and W. G. Knapp.

Q. 39. Who was the day foreman?

A. S. G. Topliff was foreman during the daytime up until about three years ago, and then W. G. Knapp acted as day foreman.

Q. 40. Are you sure it was three years ago Mr.

(Deposition of Arthur G. Willard.)

Knapp became foreman or possibly four, or a little over four?

A. I am not sure as to the date.

Mr. LYON.—Objected to as leading and suggestive.

Q. 41. (By Mr. BLAKESLEE.) Were the Wilson under-reamers part of the sole business of the Wilson & Willard Manufacturing Company?

A. They were part of it; yes, sir.

Q. 42. Did they handle the entire accounts and divide the profits? A. No, sir. [273—215]

Q. 43. What was the arrangement of the accounts and profit distribution on the Wilson under-reamer?

A. Mr. E. C. Wilson was charged so much per hour for all work on the Wilson under-reamer, and the profits went to E. C. Wilson personally.

Q. 44. Did any other person have any interest in the Wilson under-reamer account other than Mr. E. C. Wilson? A. No, sir.

Q. 45. That covers the entire period of the existence of the Wilson & Willard Manufacturing Company? A. Yes, sir.

Q. 46. Did the Wilson & Willard Manufacturing Company ever manufacture, directly or indirectly, any under-reamer for any account other than of Mr. E. C. Wilson? A. Yes, sir.

Q. 47. For whom?

A. One for A. G. Willard, and several for J. M. Kellerman.

Q. 48. For anybody else, if you remember?

A. Not that I remember.

(Deposition of Arthur G. Willard.)

Q. 49. When did the Wilson & Willard Manufacturing Company commence any work in connection with the Bole pumps?

A. I think it was the first of 1908.

Q. 50. What was the general arrangement as to the handling of this Bole pump business?

Mr. LYON.—Objected to as irrelevant and immaterial, and this objection may be taken as repeated to each and every question asked this witness in regard to such Bole pump business. It has no bearing whatever upon issues of priority of invention herein involved.

A. The Bole pump had been manufactured by R. E. Bole for some time at Bakersfield and Coalinga, and Mr. Bole removed to Los [274—216] Angeles, and I believed the pump was the best oil well pump that was being made at that time and I entered into an arrangement with Mr. Bole whereby the pump was to be manufactured by the Wilson & Willard Manufacturing Company.

Q. 51. (By Mr. BLAKESLEE.) How did you participate in this arrangement, if in any way, personally?

A. I made the arrangement with Mr. Bole whereby I was to participate in the earnings of the pump.

Q. 52. How long did this business continue, namely this pump business, in connection with the business of the Wilson & Willard Manufacturing Company?

A. Until January or February, 1913.

Q. 53. 1908 it started? A. Yes, sir.

(Deposition of Arthur G. Willard.)

Q. 54. During that time did Mr. Bole put in any of his time at the shop of the Wilson & Willard Manufacturing Company?

A. During the years of 1908 and 1909, and possibly 1910, part of his time was for the Wilson & Willard Manufacturing Company.

Q. 55. What was he doing for the company during those years?

A. Just whatever he was told to do.

Q. 56. He was an employee of the company?

A. Yes, sir.

Q. 57. Did machine work for the company?

A. Yes, he could, if he was told to.

Q. 58. Did so? A. Yes, sir.

Q. 59. After those years did he perform services for the company?

A. If he did, it was of his own free will. He was working for the Bole Pump Company.

Q. 60. Did he put in much of his time after 1910 at the shop of the Wilson & Willard Manufacturing Company? [275—217] A. Yes, sir.

Q. 61. How frequently was he at the shop?

A. He might be there every day for months, at a time, and might be absent from the city for two or three weeks.

Q. 62. He was in and out of the shop during 1911 and 1912, quite frequently? A. Yes, sir.

Q. 63. What were Mr. Bole's labors at the place of business of the Wilson & Willard Manufacturing Company during 1911 and 1912?

A. He would come when he wanted to and went

(Deposition of Arthur G. Willard.)

when he wanted to.

Q. 64. What part of the premises did he frequent during those years?

A. He had access to the whole shop.

Q. 65. How about the office?

A. He had access to the office; the records and everything were kept in there.

Q. 66. He was on a friendly basis with everyone in the shop, or at least in the control and management of the shop, during 1911 and 1912?

A. With the management, yes.

Q. 67. Was taken into the confidence of yourself and Mr. Wilson, Mr. E. C. Wilson and Mr. W. W. Wilson, during those years, was he not?

A. He was never barred from any discussion of any new inventions; I don't know as he was taken into the confidence of the management of the shop.

Q. 68. Is it true you conferred with him and talked things over with him just as though he was kind of a shop brother?

Mr. LYON.—Objected to as leading. A. Sure.

Q. 69. (By Mr. BLAKESLEE.) When, to your knowledge, was the first Wilson under-reamer made? [276—218]

A. Manufactured at the Baker Iron Works long years ago.

Q. 70. About how early?

A. I should say in 1904 or 1905 or 1906; somewhere along there.

Q. 71. Where were these reamers next manufactured?

(Deposition of Arthur G. Willard.)

A. Bakersfield Iron Works, Bakersfield, Cal.

Q. 72. Where after that?

A. Wilson & Willard Manufacturing Company, Los Angeles, California.

Q. 73. Please look around the room and see if you see any under-reamers here which are properly described as Wilson under-reamers as you have testified generally.

A. There appears to be several of them on the floor.

Q. 74. Point out one of them, please.

A. (Witness indicates.)

Mr. BLAKESLEE.—The witness indicates Wilson Exhibit; Wilson Under-reamer No. 255.

Q. 75. Are you acquainted with the construction of that reamer you have just pointed out, both interior and as appears outside? A. Yes, sir.

Q. 76. How many such reamers approximately have you seen manufactured? That is, of the type before you.

A. I suppose two or three hundred.

Q. 77. Since the commencement of the manufacture of the Wilson under-reamer at the Baker Iron Works, have there been any particular changes in the design and construction of the same, and if so, please briefly indicate what those changes have been.

A. The present type of under-reamer is altogether different from the original Wilson under-reamer. It would be rather difficult to explain just what changes have taken place.

Q. 78. In the type of under-reamer before you now, and under discussion, are there any general

(Deposition of Arthur G. Willard.)

features present which were not [277—219] in the earlier under-reamers, and if so, what?

A. It is known as the slotted tee bar type.

Q. 79. What is the slotted tee bar provided for?

A. To pass on either side of a stationary key.

Q. 80. What is the purpose of the key?

A. To hold the spring and tee bar in place.

Q. 81. Was there ever anything else used in the Wilson under-reamer for holding the spring at the lower end?

A. There was screws and blocks, in one type, and pins and blocks in another type, a 2-piece key in another type.

Q. 82. Are those the only means—Do you remember any further means for holding the spring in the Wilson under-reamer at the lower end?

A. No, sir.

Q. 83. I show you two blue-print photographs, with the titles on the back obscured, and ask you if you know what they show. Just keep the titles obscured.

A. Show the type of the 2-piece key.

Q. 84. Have you ever seen any under-reamer constructed as portrayed in these photographs?

A. Yes, sir.

Q. 85. What was the name of the under-reamer?

A. The Wilson under-reamer.

Q. 86. Where were they made?

A. Bakersfield Iron Works, Bakersfield, California, and Wilson & Willard Manufacturing Company, Los Angeles, California.

(Deposition of Arthur G. Willard.)

Mr. BLAKESLEE.—It may be noted that the witness has just been referring to “Wilson Exhibit Photo ‘B’ of Wilson Reamer, 2-piece Key Device,” and “Wilson Exhibit Photo ‘A’ of Wilson Reamer 2-piece Key Device.”

Q. 87. How many Wilson under-reamers having this 2-piece key [278—220] device, approximately, have you seen?

A. Oh, a hundred or more, I guess.

Q. 88. When, so far as you know, was the last such 2-piece key Wilson under-reamer made?

A. I could not say within a year or two; possibly 1909 or 1910.

Q. 89. Aside from changing the nature of the device for holding the lower end of the spring in the Wilson under-reamer, can you specify any other particular changes that have been made in the construction and combination of parts in the Wilson under-reamer?

A. Do you refer to the shape of the body or the cutters?

Q. 90. Any material or particular change made in the construction of the under-reamer.

Mr. LYON.—Objected to as calling for a conclusion of the witness. The witness may or may not consider a given change a material one.

Mr. BLAKESLEE.—The witness has testified he is a machinist and has been manufacturing oil well tools for a number of years.

Mr. LYON.—If it be sought to show anything of the history of the Wilson under-reamer, the facts

(Deposition of Arthur G. Willard.)

should be shown and not the conclusion of the witness as to whether the changes were or were not material, and it is not the subject of expert testimony.

A. To the best of my recollection the Wilson & Willard Manufacturing Company made the Wilson under-reamer with 2-piece keys during 1907 and 1908, and from 1909 to 1910 they used screws and a block; and from 1911 up to the present time they used a single-piece key.

Q. 91. (By Mr. BLAKESLEE.) Do you remember any other changes made in the Wilson under-reamer during the years you have just mentioned, in its construction?

A. Part of the time they used the bottom bolt and part of the time we did not. [279—221]

Q. 92. Anything else?

A. Used an old type tee bar, then a slotted, then the solid, then went back to the slotted.

Q. 93. That was in connection with the 2-piece block and screws and the 1-piece key; is that correct?

A. Yes, sir.

Q. 94. When, as near as you can recollect, did the Wilson & Willard Manufacturing Company first commence to make the Wilson under-reamers with the 1-piece key for holding the bottom of the spring?

A. By referring to the shop orders it was February, 1911.

Q. 95. Do you recollect the manufacture of the first reamer containing such single-piece key?

A. I don't remember the number of it. It was sold to the Norbeck-Nicholson Company.

(Deposition of Arthur G. Willard.)

Q. 96. As near as you can recollect, about when was work started on this first reamer with the single-piece key, the first Wilson reamer?

A. February, 1911.

Q. 97. Do you remember whether you saw the order for that reamer when it was placed in the shop? A. Yes, sir.

Q. 98. Do you believe you would be able to recognize it if you saw it now? A. I think so.

Q. 99. I show you a bunch of slips connected together, keeping the title on the back obscured, and ask you if you know what they are.

A. It was a shop order for changing an 8-inch reamer, No. 120; one of them is the shop order for machining one special 8-inch slotted tee, and one is a sketch of a slotted tee bar; the others [280—222] are time cards handed in by the men.

Q. 100. Do you remember anything about the making up of the bars specified in these slips?

A. I remember it was ordered by Mr. Wilson.

Q. 101. Do you remember anything connected with the work on the same in the shop?

A. It was forged and machined as directed by Mr. Wilson, as ordered by Mr. Wilson.

Q. 102. Who was the foreman at the time in the shop? A. W. G. Knapp.

Q. 103. Were you present in the shop during the manufacture of these bars? A. Yes, sir.

Q. 104. Do you remember whether you saw, or not, this reamer, No. 120, when it was changed over, as instructed in connection with these slips?

(Deposition of Arthur G. Willard.)

Mr. LYON.—Objected to as leading and calling for a conclusion of the witness, and assuming facts not appearing from the testimony.

Mr. BLAKESLEE.—Strike the question out.

Q. 105. Do you remember whether the work called for by these slips was executed?

Mr. LYON.—Objected to as incompetent, calling for a conclusion of the witness, not being a statement of fact, and leading.

A. The tee bar was forged and machined as ordered.

Q. 106. (By Mr. BLAKESLEE.) How about the special springs?

A. It would be necessary to make a special spring as the tee bar was extra large.

Q. 107. Is that all these slips call for, a key, etc.? Do you know what that means? (Indicating.)

A. It means the key that holds the spring and tee bar in place.

Q. 108. What did such key have to do with such reamer No. 120? [281—223]

A. It was the key sent with that reamer.

Q. 109. That is the first reamer you remember having such key? A. Yes, sir.

Q. 110. And it went to Norbeck-Nicholson Company?

A. Shipped to Norbeck-Nicholson Company, yes, sir.

Q. 111. As to the extra heavy slotted tee called for by these slips of papers, do you know when the first such slotted tee was made in that shop as called for here?

(Deposition of Arthur G. Willard.)

A. During January or February, 1911.

Q. 112. What kinds of things were used in connection with such extra heavy slotted tees for holding the lower end of the spring in the Wilson under-reamer? A. Keys.

Q. 113. What kind of keys?

A. Heretofore they would always use a 2-piece key, but on this particular reamer they used a 1-piece key.

Q. 114. And after that, and in the succeeding manufacture of the Wilson under-reamers, what was used?

A. From that date on they used the single-piece key.

Q. 115. Was any other kind of key ever used with such extra heavy slotted tees after that?

A. No, sir.

Q. 116. Please compare the reamer which was made and shipped, as you say, to the Norbeck-Nicholson Company, pursuant to the order given as No. 6904, on these slips of paper, with the Wilson under-reamer as exemplified in "Wilson's Exhibit Wilson Under-reamer No. 255." Compare that with this.

A. I don't know as I get what you mean.

Q. 117. Compare that reamer made over and shipped with that one there (indicating). That is, compare reamer 120 as made over and shipped with the "Wilson Exhibit Wilson Under-reamer No. 255." [282—224]

A. It was practically the same reamer, so far as the construction.

United States
Circuit Court of Appeals

For the Ninth Circuit.

Transcript of Record.
(IN THREE VOLUMES.)

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VOLUME II.
(Pages 321 to 672, Inclusive.)

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(Deposition of Arthur G. Willard.)

Q. 118. How did the key in that reamer No. 120 compare with the key in this exhibit No. 255?

A. The same type of key.

Mr. BLAKESLEE.—Let it be noted that the witness in his recent testimony pertinent to the slips of paper has been referring to “Wilson Exhibit February, 1911, Wilson & Willard Manufacturing Company Shop Record Slips.”

Q. 119. Prior to the manufacture of this reamer, or the change over of this reamer No. 120, had you ever heard of a reamer constructed to include a 1-piece key like the one which was made for that reamer No. 120?

A. No, sir; not like the reamer No. 120.

Q. 120. Had you before that time ever heard of such a key yourself, that is, made like the key that was built into this reamer?

Mr. LYON.—Objected to as leading.

A. No, sir.

Q. 121. (By Mr. BLAKESLEE.) From whom did you first hear, or from what source did you first hear of a 1-piece key like the one that was built in the reamer No. 120 when it was built over?

A. I got it from the shop records of the Wilson & Willard Manufacturing Company.

Q. 122. Prior to the changing over of that reamer No. 120 did you ever hear anybody claim that he had devised such 1-piece key for such reamer?

Mr. LYON.—Objected to as leading and calling for a conclusion of the witness, and not the best evidence

(Deposition of Arthur G. Willard.)

and not the proper manner of proving the conversation.

A. No, sir.

Q. 123. (By Mr. BLAKESLEE.) At the time that this reamer No. 120 [283—225] was made over on shop order No. 6904, was anything said to you by anybody in the line of instructions for the making of the key built into such reamer, to your knowledge?

Mr. LYON.—Objected to as leading and calling for a conclusion of the witness, incompetent, and not the proper method of proving a conversation and not the proper method of proof.

A. No, sir.

Q. 124. (By Mr. BLAKESLEE.) What, if anything, do you know about the execution of this shop order No. 6904 in the shop, and as to any instructions other than the written shop order which you have examined, if there were any such?

A. I don't know of any.

Q. 125. During the period commencing a week or two prior to the commencement of making over this reamer No. 120 and ending with the actual commencement of work upon such order 6904, did you have any conversation with anybody concerning any modification of the construction of the Wilson under-reamer?

Mr. LYON.—Objected to as not the proper method of proof.

A. There had been a number of conferences prior to that time.

(Deposition of Arthur G. Willard.)

Q. 126. (By Mr. BLAKESLEE.) Who was present at such conferences?

A. It is pretty hard to say. Maybe Mr. Wilson and myself would be together. There might be Mr. Wilson and Mr. W. W. Wilson, and might be E. C. Wilson and C. E. Wilcox and myself.

Mr. LYON.—Move to strike from the answer and exclude from consideration all that portion of the answer following the words “It is pretty hard to say,” on the ground that the same is merely a guess and thought of the witness and not stated as a fact, and incompetent.

Mr. BLAKESLEE.—We consent to the striking out of the answer.

Q. 127. Let me ask you, Mr. Willard, if, during the time, namely, the period commencing about two weeks prior to the commencement [284—226] of the working over or making over of this reamer No. 120 and ending at a time when this work was well under way, whether during this period of time you were present when anybody discussed modifying the construction of the Wilson under-reamer as it was then made, and this question is as to whether you were present, only.

Mr. LYON.—The question is objected to as leading, in so far as it attempts to fix the date or dates, and not the proper method of proof.

A. Yes, sir.

Q. 128. (By Mr. BLAKESLEE.) Do you remember anyone else that was present at any such discussion during that time?

(Deposition of Arthur G. Willard.)

Mr. LYON.—Same objection.

A. No, sir.

Q. 129. (By Mr. BLAKESLEE.) Do you remember anything said during that period by anyone with reference to the modification of the construction of the Wilson under-reamer?

Mr. LYON.—Same objection.

A. Mr. Wilson was working at the draughting board and he called my attention to the fact that we could, by boring out the mouth of the reamer a little larger,—he could make a tee bar much heavier and stronger than we had used heretofore; that was some two or three weeks prior to the changing over of the reamer.

Q. 130. (By Mr. BLAKESLEE.) Did anything else occur about that time, that you recollect, pertinent to the business of the Wilson under-reamer?

Mr. LYON.—Same objection, inasmuch as it is leading as to the date of such occurrence, the date being one of the material facts in this case.

A. About that time the Wilson & Willard Manufacturing Company received a letter from a man named Williams of McKittrick, ordering [285—227] an old-style slotted tee bar, and it seemed remarkable that a man would want that type of a tee bar inasmuch as they had not been manufactured for two years prior to that time.

Q. 131. (By Mr. BLAKESLEE.) Do you know whether any record was made in the records of the Wilson & Willard Manufacturing Company as to this order from Mr. Williams? A. Yes, sir.

(Deposition of Arthur G. Willard.)

Q. 132. Can you turn among the records present of the Wilson & Willard Manufacturing Company to any entry covering such order?

A. The records of that date should show.

Q. 133. Please inspect the records that are present and point to any such entry if you can find it.

A. It is not here.

Q. 134. I show you two slips of yellow paper, which I have withdrawn from an envelope, and ask you if you know anything about them.

A. It is a shop order of the Wilson & Willard Manufacturing Company for a 12½ inch slotted tee bar, to be shipped to McKittrick, California.

Q. 135. Did you ever see those slips of paper before? A. Yes, sir.

Q. 136. When for the first time?

A. During January, 1911.

Q. 137. Where?

A. At the shop of the Wilson & Willard Manufacturing Company.

Q. 138. Do you know anything about the matters further, about the matters referred to on those slips?

A. I know that Mr. Wilson wrote a letter to Mr. Williams asking him about the slotted tee bar, and also his opinion of it.

Q. 139. Do you know anything about any shop matters connected with the matter of these slips?
[286—228]

A. None other than the order was filled.

Q. 140. Do you know what the letter K after the word foreman signifies?

(Deposition of Arthur G. Willard.)

A. It stands for Knapp, the foreman.

Q. 141. What does "E. C. W." stand for?

A. E. C. Wilson.

Mr. BLAKESLEE.—Let it be noted the witness has just been referring to the shop order slip of the Wilson & Willard Manufacturing Company contained in the envelope endorsed "Wilson Exhibit Pacific Iron Works Order of January 26, 1911."

Q. 142. I show you what purports to be a letter on the letter paper of the Pacific Iron Works dated January 28, 1911, and signed "Pacific Iron Works, H. S. Williams, Manager," and ask you if you ever saw that before.

A. Yes, sir.

Q. 143. When did you first see it?

A. January, 1911. Mr. Wilson called my attention to it upon receipt of the letter.

Q. 144. Did Mr. Wilson say anything else to you at that time?

A. He made the remark, he says, "Could it be possible that the slotted tee bar"—"Could it be possible to make the slotted tee bar strong enough," or words to that effect.

Q. 145. Was it about this time that Mr. Wilson was working at the board?

Mr. LYON.—Objected to as leading.

A. The same day.

Mr. BLAKESLEE.—Let it be noted that the witness has been just referring to Wilson Pacific Iron Works Letter of January 28, 1911.

Q. 146. Prior to the commencement of the work

(Deposition of Arthur G. Willard.)

upon shop order 6904 for making over the reamer No. 120, had you ever seen a sketch [287—229] of a single-piece key for an under-reamer?

Mr. LYON.—Objected to as leading.

Q. 147. (By Mr. BLAKESLEE.) Prior to the same time mentioned in the last question had you ever seen any written memoranda letter or the like describing or attempting to describe or in any way disclosing or referring to a single-piece key for under-reamers?

Mr. LYON.—Objected to as leading.

A. No, sir.

Q. 148. (By Mr. BLAKESLEE.) Prior to the same period of time mentioned in the two questions preceding, had you ever heard of a single-piece key for under-reamers like that which was built into reamer No. 120 when it was made over?

Mr. LYON.—Objected to as leading.

A. No, sir.

Q. 149. (By Mr. BLAKESLEE.) Do you know who had charge of receiving and opening of the mail of the Wilson & Willard Manufacturing Company during the years 1908 and 1909?

A. Myself or W. W. Wilson.

Q. 150. During those two years did you ever see any letter containing an order from anyone for an under-reamer accompanied by a sketch of a single-piece key for under-reamers?

Mr. LYON.—Objected to as leading.

A. Not that I remember.

Q. 151. (By Mr. BLAKESLEE.) Prior to the

(Deposition of Arthur G. Willard.)

commencement of the changing over of this Wilson reamer No. 120, do you know whether Mr. Robert E. Bole turned in any orders to the Wilson & Willard Manufacturing Company for any under-reamers?

A. He turned one, in particular; the one he sold to the Sunset-Monarch Oil Company for a Wilson under-reamer, $9\frac{5}{8}$ inch, with 10-inch cutters. [288—230]

Q. 152. How did he turn it in?

A. By mail.

Q. 152½. What did it call for?

A. It called for a $9\frac{5}{8}$ -inch Wilson under-reamer, extra set of cutters for 10-inch, and twelve Bole pumps and a Bole casing spear.

Q. 153. Do you remember anything else about that order or accompanying that order?

Mr. LYON.—Objected to as incompetent, not the best evidence, it appearing from the testimony of the witness that the said order was in writing and demand has been made for the production of the original of such order.

A. There was some suggestion regarding the changing of the Wilson under-reamer.

Q. 154. (By Mr. BLAKESLEE.) Do you remember what that suggestion was about?

A. I do not, excepting that it referred to the holding means, the means of holding the tee bar, and the spring, in place. I don't remember whether it was to change the key, pins or blocks or what, but there was some suggestion made for changing the method of holding the tee bar and spring.

(Deposition of Arthur G. Willard.)

Q. 155. You testified this order was sent in and counsel for Bole insists it was a written order. Have you anything further to say?

A. It was received through the mail.

Q. 156. Do you know whether any part of that order was entered up in the books of the Wilson & Willard Manufacturing Company?

A. It is all entered.

Q. 157. When did you last see that order, which you say was sent in through the mail?

A. I don't know.

Q. 158. Have you attempted since that order was sent in to locate whatever was sent in?

A. I looked up the shop records. [289—231]

Q. 159. Did you find any such order?

A. I found the order for the pumps and spear.

Q. 160. Could you find any written requisition or order from Mr. Bole? A. No, sir.

Q. 161. Do you know where such written order or requisition, if there was one, went?

A. No, sir.

Q. 162. When did you attempt to find any such written order sent by Mr. Bole?

A. I guess two or three years ago.

Q. 163. Long before this interference contest was instituted? A. Yes, sir.

Q. 164. How did you happen to look for it at that time?

A. There was some discussion took place as to who was the inventor of this key, and R. E. Bole claimed to have made a sketch of the single-piece

(Deposition of Arthur G. Willard.)

key and that this sketch was part of that order. And I tried to find the original order and was unable to do so.

Q. 165. Do you remember when Mr. Bole made this claim?

A. He made the claim a number of times.

Q. 166. When did he first make such claim?

A. It was sometime after this, 1911—after we adopted the single-piece key.

Q. 167. How many Wilson reamers of the single-piece key type had been used before he made that claim, roughly speaking?

A. Almost from the time the key was adopted, Mr. Bole claimed to be the inventor of that key; soon after the key had been adopted.

Q. 168. To whom did he make such claim?

A. He made it to me, for one.

Q. 169. Did you ever hear him make it to anyone else?

A. There may have been some of the boys in the shop present, but that is comomn talk among shopmen, to make assertions like that. [290—232]

Q. 170. How long after making such claim did Mr. Bole continue in attendance in the shop of the Wilson & Willard Manufacturing Company where these Wilson under-reamers with the 1-piece key were made? A. A year and a half afterwards.

Q. 171. Referring to such records of the Wilson & Willard Manufacturing Company as are here, can you find any evidence of such order for the 10-inch reamer and casing spear as you have stated Mr. Bole

(Deposition of Arthur G. Willard.)

sent in, the 9 $\frac{5}{8}$ -inch reamer with the 10-inch cutters, and the casing spear? A. Yes, sir.

Q. 172. Please refer to the records and point it out. A. (Witness indicates.)

Mr. BLAKESLEE.—Witness indicates binder folio No. 437 and No. 438, which have been copied into the record, being orders of the Sunset Monarch Oil Company, dated September 18th and September 19th, 1908, respectively.

Q. 173. What do you know about the making of these entries?

A. The entries were made by W. W. Wilson.

Q. 174. When did you first see such entries?

A. September, 1908.

Q. 175. From September, 1908, until the time after the 1-piece key had been adopted in the manufacture of the Wilson under-reamer, did Mr. Bole ever refer to any single-piece key for under-reamers?

Mr. LYON.—Objected to as leading and calling for a conclusion of the witness, and not a statement of fact; and not the proper method of proof.

A. No, sir.

Q. 176. (By Mr. BLAKESLEE.) During that period of time did he ever make any claim such as you say he made after the Wilson [291—233] reamer had been changed in construction to include this 1-piece key?

Mr. LYON.—Same objection.

A. Not to my knowledge.

Q. 177. (By Mr. BLAKESLEE.) Do you know

(Deposition of Arthur G. Willard.)

whether any of the records of the Wilson & Willard Manufacturing Company covering the period of time from the commencement of the business of the company up until the time when the Wilson reamer had been standardized to include the use of this single one-piece key were destroyed?

Mr. LYON.—Objected to as leading and not the proper method of proof, and on behalf of Bole we protest against the grossly leading character of the examination of this witness. He is evidently a friendly witness to the party Wilson, and testifies frankly.

A. No, sir.

Q. 178. (By Mr. BLAKESLEE.) What was the occasion, if you know, of the termination of the relations between Mr. Bole and the Bole Pump Company business and the Wilson & Willard Manufacturing Company?

A. The Bole Pump account with the Wilson & Willard Manufacturing Company.

Q. 179. And of Mr. Bole? A. The account.

Q. 180. What transpired with respect to the account which caused such termination?

A. Demand was made on Mr. Bole for settlement of the account of the Wilson & Willard Manufacturing Company.

Q. 181. Do you know what the amount of the claim was when that demand was made?

A. Between eight and ten thousand dollars.

Q. 182. When was this demand made?

(Deposition of Arthur G. Willard.)

A. December—November or December, 1912, I think.

Q. 183. Do you remember what resulted from such demand? [292—234]

A. It was finally settled.

Q. 184. In what manner?

A. By the Wilson & Willard Manufacturing Company accepting a certain per cent of the account.

Q. 185. Were you present when any such final settlement was entered into? A. Yes, sir.

Q. 186. Who else was present, if anyone?

A. Mr. Bole was present.

Q. 187. Anyone else?

A. Mr. W. W. Wilson may have been present, but I am not positive.

Q. 188. Do you remember anything that transpired in connection with such final settlement?

Mr. LYON.—Objected to on the ground that whatever was done at such time was done, as it appears from the record, in effecting a compromise of pending litigation between the party Bole and the Wilson & Willard Manufacturing Company, and resulted in a settlement which was reduced to writing, and any negotiation leading up to such settlement was privileged and cannot be shown in any litigation between the parties, and inasmuch as such contract of settlement was in writing the terms thereof must be proven by the writing and not by parol testimony, parol testimony being incompetent to alter, vary or change the terms of such settlement; and upon the further ground that it is irrelevant and immaterial

(Deposition of Arthur G. Willard.)

to the issues of this interference, and cannot tend to prove or enlighten any of the tribunals which are to pass upon this case as to who is or was, in fact, the prior inventor of the subject matter in controversy. And again on behalf of Bole we protest against the incumbering of the record with a mass of incompetent, irrelevant and immaterial matter.

Mr. BLAKESLEE.—Counsel for Bole seems to persist in both testifying [293—235] and brief writing, and this is not the proper time, we insist, for such diligence.

A. There was a contract drawn up and signed by Mr. Bole and Mr. E. C. Wilson.

Q. 189. What was the nature of that contract, if you remember?

Mr. LYON.—Same objection as to the preceding question.

A. R. E. Bole was to pay a certain sum of money within a given time, and he was to have a certain length of time in which to remove his material.

Q. 190. (By Mr. BLAKESLEE.) Did you see that paper signed? A. Yes, sir.

Q. 191. Did both parties sign it? Both Mr. Bole and the Wilson & Willard Manufacturing Company?

A. Yes, sir; I think so.

Q. 192. Do you remember anything that transpired leading up to this compromise or settlement and calling for such compromise?

Mr. LYON.—Objected to as heretofore, the same objection as noted to the two preceding questions.

(Deposition of Arthur G. Willard.)

A. I did everything in my power to bring a settlement about.

Q. 193. (By Mr. BLAKESLEE.) Why was it necessary to compromise the matter?

Mr. LYON.—Same objection.

A. Well, we believed at that time that our account was more than Bole's material was worth.

Q. 194. (By Mr. BLAKESLEE.) Why didn't Bole pay you the full amount of the indebtedness?

Mr. LYON.—Same objection.

A. He claimed he could not.

Q. 195. (By Mr. BLAKESLEE.) What do you mean by Bole's material?

A. Material which he used in the construction of the Bole pump.

Q. 196. Were any representations made by Mr. Bole at that time [294—236] as to his worth or assets?

Mr. LYON.—Same objection.

A. He may have made some, but I don't remember them.

Q. 197. (By Mr. BLAKESLEE.) Did you or the company then take steps at that time to inquire of Mr. Bole as to his worth or assets?

Mr. LYON.—Same objection.

A. We knew where the stock was located in Bakersfield and Coalinga and at the Wilson & Willard Manufacturing Company in Los Angeles, and we were able to judge for ourselves.

Q. 198. (By Mr. BLAKESLEE.) Was it your conclusion that he could not pay the full amount of

(Deposition of Arthur G. Willard.)

the indebtedness?

Mr. LYON.—Same objection.

A. I, for one, was willing for the settlement.

Q. 199. (By Mr. BLAKESLEE.) Did you conclude that he could not pay the full amount?

Mr. LYON.—Same objection.

A. Yes, sir.

Q. 200. (By Mr. BLAKESLEE.) Do you believe now he could have paid the same, the full amount?

Mr. LYON.—Same objection.

A. No, sir; that is in addition to the material.

Q. 201. (By Mr. BLAKESLEE.) Do you think he could have otherwise?

Mr. LYON.—Same objection.

A. I could not say that I do.

Q. 202. (By Mr. BLAKESLEE.) Was it your belief at that time when you were willing that this settlement should be effected that that was the best settlement you could obtain from Mr. Bole?

Mr. LYON.—Same objection.

A. I believed so at the time.

Q. 203. (By Mr. BLAKESLEE.) Do you remember anything that was said at the time of that final settlement by any party present— [295—237]

Mr. LYON.—Same objection.

A. There was a good many things said, but I don't remember any particular thing.

Q. 204. (By Mr. BLAKESLEE.) Do you remember whether any reference was made at that time to the subject of the key for under-reamers?

(Deposition of Arthur G. Willard.)

Mr. LYON.—Same objection, leading and suggestive.

A. No, sir.

Q. 205. (By Mr. BLAKESLEE.) Don't you remember anything?

Mr. LYON.—Same objection.

A. I don't remember anything, no, sir.

Q. 206. (By Mr. BLAKESLEE.) Was anything done at that settlement, if you remember, in the actual squaring up of the account, in accordance with the compromise?

Mr. LYON.—Same objection.

A. Just a cash consideration. There was nothing else taken into account.

Q. 207. (By Mr. BLAKESLEE.) Do you know whether any receipt was given for that cash consideration?

Mr. LYON.—Same objection.

A. I suppose there was.

Q. 208. (By Mr. BLAKESLEE.) Did you see it given?

Mr. LYON.—Same objection.

A. I think so.

Q. 209. (By Mr. BLAKESLEE.) Do you know whether there was any other paper passed between the parties at that time other than this receipt for said payment?

Mr. LYON.—Same objection.

A. I think the receipt was all. The contract had been drawn up prior to that time.

(Deposition of Arthur G. Willard.)

Q. 210. (By Mr. BLAKESLEE.) And the contract was the receipt?

Mr. LYON.—Same objection. [296—238]

A. No, I think Mr. Bole was given a receipt in full when he made the final payment.

Q. 211. (By Mr. BLAKESLEE.) You think there was a contract besides that?

Mr. LYON.—Same objection.

A. I think so; yes, sir.

Q. 212. (By Mr. BLAKESLEE.) Are you reasonably sure as to that?

Mr. LYON.—Same objection.

A. Quite positive.

Q. 213. (By Mr. BLAKESLEE.) This settlement, to the best of your memory, was finally effected when?

Mr. LYON.—Same objection.

A. March, 1913.

Q. 214. (By Mr. BLAKESLEE.) Did Mr. Bole continue his calls at the shop of the Wilson & Willard Manufacturing Company after that settlement?

A. No, sir; he was there from time to time, but he was not there daily.

Q. 215. Do you know what his next business move was?

A. He made arrangements to go to the Union Tool Company to manufacture his pumps.

Q. 216. Do you know whether prior to that time he had ever had any relations with the Union Tool Company?

Mr. LYON.—Objected to as irrelevant, immaterial

(Deposition of Arthur G. Willard.)

to the issues of this interference, and needlessly incumbering the record.

A. No, sir. He had no business relation with them. He was acquainted with Mr. Double, the president and general manager.

Q. 217. (By Mr. BLAKESLEE.) What is, and was then, and has been, so far as you know, the business of the Union Tool Company mentioned?

A. Manufacturing oil well tools.

Q. 218. How long has it manufactured oil well tools, so far as you know? [297—239]

A. Fifteen or sixteen years.

Q. 219. In what field does it operate?

A. In the oil business.

Q. 220. In what general territory?

A. Wherever oil fields are located. They ship tools all over the world, I guess.

Q. 221. Does it manufacture anything that the Wilson & Willard Manufacturing Company has been turning out, anything of the same kind of tool?

A. Manufactures all the same types; that is, manufactures under-reamers and elevators and casing spears, manufactures a general line.

Q. 222. Then that company is a competitor of the Wilson & Willard Manufacturing Company?

A. Yes, to a certain extent.

Q. 223. How long has it been such competitor?

A. Ever since the existence of the Wilson & Willard Manufacturing Company.

Q. 224. What connection has Mr. Edward Double with that company?

(Deposition of Arthur G. Willard.)

A. President and general manager, I understand.

Q. 225. Is there any litigation pending, that you know of, involving the interests of the Union Tool Company and the interests of the Wilson & Willard Manufacturing Company and individuals associated with both interests?

A. Yes, sir; there are several suits.

Q. 226. What do those suits involve, what kind of devices? A. Under-reamers and rotaries.

Q. 227. Do you know when the first of said suits was instituted? A. In 1908, something like that.

Q. 228. What did that suit concern, what kind of apparatus?

A. Wilson under-reamers. [298—240]

Q. Who brought the suit?

A. Union Tool Company and others.

Q. 230. Who was the defendant?

A. The Wilson & Willard Manufacturing Company.

Q. 231. That suit is still pending?

A. Yes, sir.

Q. 232. There is other litigation involving the under-reamer brought by the Wilson & Willard Manufacturing Company interests against the Union Tool Company interests, is there not?

A. Yes, sir.

Q. 233. Also litigation between the same interests and allied interests? A. Yes, sir.

Q. 234. Involving the rotary well-drilling apparatus, is there not? A. Yes, sir.

Q. 235. Has the business of the Wilson & Willard

(Deposition of Arthur G. Willard.)

Manufacturing Company any particular competitor as to under-reamers?

A. The Union Tool Company.

Q. 236. That is its chief competitor?

A. Yes, sir.

Q. 237. Do you know Charles E. Wilcox of East Bakersfield, now in Los Angeles? A. Yes, sir.

Q. 238. With what company is he connected?

A. The Wilson & Willard Manufacturing Company.

Q. 239. How long has he been connected with that company? A. Three or four years.

Q. 240. Was he connected with that company in 1911 when reamer No. 120 was made over, as you have testified? A. Yes, sir. [299—241]

Q. 241. Do you know whether he was familiar with the construction, at that time, of the Wilson under-reamer, as made at that time? A. Yes, sir.

Q. 242. Was Mr. Robert E. Bole familiar with the construction of the Wilson under-reamer at that time? A. Yes, sir.

Q. 243. And Mr. Knapp, at that time, superintended all of the shop work upon the Wilson under-reamers, did he?

Mr. LYON.—Objected to as leading and calling for a conclusion of the witness, and not stating the facts. And while I have not been objecting lately to the leading questions, we continue our protest against counsel leading the witness as he has been and now is.

Mr. BLAKESLEE.—We shall expect counsel to

(Deposition of Arthur G. Willard.)

object if he feels he should object to any question, and it is to be noted that as to one recent question in particular counsel permitted the answer to be made up because the facts were undisputed and of record.

Mr. LYON.—Then if the facts are undisputed and of record, why incumber the record?

Mr. BLAKESLEE.—They are not all of record before the Patent Office, but they are deemed a material part of the examination of this witness.

Mr. LYON.—Then the examination of this witness should be conducted according to the rules of evidence.

Mr. BLAKESLEE.—Then we shall expect counsel to object when he feels the rules are being departed from. I will withdraw the question.

Q. 244. Who was the foreman, the general foreman of the shop of the Wilson & Willard Manufacturing Company at the time reamer No. 120 was made over, and under whom the Wilson reamers were constructed? A. W. G. Knapp. [300—242]

Q. 245. I now show you two attached blue-prints without showing you the title of the same as an exhibit, and ask you if you are familiar with the contents of the same? A. Yes, sir.

Q. 246. What do they represent generally?

A. The slotted tee bar and 1-piece key and parts of the Wilson under-reamer.

Q. 247. Have you ever seen these blue-prints or copies of the same before? A. Yes, sir.

Q. 248. When and where, and how early?

(Deposition of Arthur G. Willard.)

A. During the year of 1911, at the office of the Wilson & Willard Manufacturing Company.

Q. 249. How were they used, and for what purpose?

A. Used as records of the size of the tee bar and key.

Q. 250. For what purpose?

A. Used in the manufacture of the Wilson underreamers.

Mr. BLAKESLEE.—Let it be noted that the witness has just been referring to Wilson Exhibit Wilson Reamer Shop Blue-prints of Tracings of May 6, 1911, and June 2, 1911.

Q. 251. I show you a brown piece of paper with red and black characters and lines thereon, concealing the exhibit description, and I will ask you if you have ever seen the same before.

A. Not to my knowledge.

Mr. BLAKESLEE.—Let the record show that the witness refers to Wilson Exhibit Wilson Reamer Tee and Key Sketch of 1911.

Q. 252. To your knowledge did the relations between Mr. E. C. Wilson and Mr. Robert E. Bole continue the same after the settlement in the first part of 1913? A. I believe not.

Q. 253. What change in such relations was there?
[301—243]

A. A difference of opinion on different subjects.

Q. 254. What was Mr. Bole's attitude to Mr. Wilson at and since that time?

A. I guess the feelings are mutual.

(Deposition of Arthur G. Willard.)

Q. 255. How would you describe them generally?

A. They were not throwing bouquets at one another.

Q. 256. What have your personal relations with Mr. Bole been since that time?

A. Just the same as prior to that time.

Q. 257. By that you mean friendly?

A. He is a personal friend of mine; yes, sir.

Q. 258. You have testified that so far as you know none of the records of the Wilson & Willard Manufacturing Company have been destroyed. Please state to the best of your knowledge and belief anything that you know with regard to any changes in the condition of the records of the Wilson & Willard Manufacturing Company of any nature whatsoever, resulting from loss or misplacement or fire or other accident or act of any party.

Mr. LYON.—Objected to as assuming facts not appearing from the testimony of the witness.

Q. 259. (By Mr. BLAKESLEE.) Have there been any such?

Mr. LYON.—And as calling for a conclusion of the witness.

A. There has been no loss through fire, and there is none by misplacement, to my knowledge.

Q. 260. (By Mr. BLAKESLEE.) During that time Mr. Bole had access to the various parts and premises of the Wilson & Willard Manufacturing Company. Do you know whether he had access to the records of the Wilson & Willard Manufacturing Company in their private and general office?

(Deposition of Arthur G. Willard.)

Mr. LYON.—Objected to as leading and calling for a conclusion of the witness. [302—244]

A. I suppose he had access if he wanted it.

Q. 261. (By Mr. BLAKESLEE.) No steps were taken to prevent him referring to any records or papers of the company?

Mr. LYON.—Objected to as leading.

A. No, sir.

Q. 262. (By Mr. BLAKESLEE.) What have you to say with regard to Mr. Wilson's position with relation to this 1-piece key adopted for the construction of the Wilson under-reamer, in so far as you have ever heard him make any statement with regard thereto, or any act of invention connected therewith?

Mr. LYON.—Objected to as calling for a conclusion of the witness and an expression of opinion of the witness, and incompetent, and not the proper method of proof, and a mere self-serving statement at the most, unless it is contended that such statement was made in the presence of the party Bole, or those in interest with him.

A. He has claimed a number of times to be the inventor of all improvements of the Wilson under-reamer.

Mr. LYON.—Move to strike the answer from the record, and exclude it from consideration upon the grounds stated in the objection to the question, it being a mere conclusion of the witness and not attempting to state the conversation or conversations, and upon each of the other grounds stated in the objections to the questions.

(Deposition of Arthur G. Willard.)

Q. 263. If Mr. Bole, prior to the adoption of the 1-piece key for the Wilson under-reamer had any contention or claimed to have had anything to do whatsoever with providing or producing that key, or suggesting that key, and had made any such statement to you or in your presence, do you believe that you would remember the same at this time?

A. No, sir; I don't. [303—245]

Q. 264. Did anybody, to your knowledge, ever make any suggestions of any features of change of the Wilson under-reamer which were incorporated in that reamer prior to the adoption of this 1-piece key? A. Not to my knowledge.

Q. 265. Then, if Mr. Bole had made any such suggestion prior to that time, do you not consider it probable that the suggestion would have stood out in your memory?

Mr. LYON.—Same objection, and as hypothetical and incompetent.

A. No, sir.

Q. 266. (By Mr. BLAKESLEE.) For what reason?

Mr. LYON.—Same objection.

A. Mr. Bole has a number of inventions of his own, and he has good suggestions along all lines and a number of times he has suggested improvements for one tool or another, not only once but repeatedly.

Q. 267. (By Mr. BLAKESLEE.) Do you know whether Mr. Bole has any issued patents for improvements of his own?

(Deposition of Arthur G. Willard.)

Mr. LYON.—Objected to as irrelevant and immaterial.

A. A number of them.

Q. 268. (By Mr. BLAKESLEE.) Do you know how many of these are in use, things for which he has received patents?

Mr. LYON.—Same objection.

A. I know he has a number of applications pending. I only know of the one issued patent. That is for the Bole pump.

Q. 269. Do you know how many articles Mr. Bole has on the market at the present time?

Mr. LYON.—Objected to as irrelevant, immaterial.

A. He is making the Bole pump and the Bole cage, Bole folding-cot.

Q. 270. (By Mr. BLAKESLEE.) Do you know whether he has any extensive business in any of these devices? [304—246]

Mr. LYON.—Objected to as irrelevant and immaterial, and calling for a conclusion of the witness; incompetent, and no foundation laid.

A. I understand he has a good business with the Bole pump.

Q. 271. (By Mr. BLAKESLEE.) Do you know anything about Mr. Bole's invention of the Bole pump which he has patented?

Mr. LYON.—Objected to as irrelevant, immaterial.

A. No, sir.

Q. 272. (By Mr. BLAKESLEE.) Do you know

(Deposition of Arthur G. Willard.)

when he invented it?

Mr. LYON.—Same objection.

A. Yes, sir.

Q. 273. (By Mr. BLAKESLEE.) Do you know when and where Mr. Bole worked out this pump which he patented?

A. He was working for the Bakersfield Iron Works.

Mr. LYON.—Same objection.

Q. 274. (By Mr. BLAKESLEE.) Was anybody else at that time working upon a pump of that kind?

Mr. LYON.—The same objection.

A. There were a number of oil well-pumps came out about the same time.

Q. 275. (By Mr. BLAKESLEE.) Was anybody working upon a pump at that time in connection with Mr. Bode, if you know?

Mr. LYON.—Same objection.

A. Not in connection with Mr. Bole that I know of.

Q. 276. (By Mr. BLAKESLEE.) Who was working on a pump at the same time that you know?

Mr. LYON.—Same objection.

A. I was working on a pump, and a man by the name of Barnes was working on a pump.

Q. 277. (By Mr. BLAKESLEE.) What kind of a pump was Barnes working on?

Mr. LYON.—Objected to as irrelevant and immaterial, and on behalf [305—247] of Bole we again protest against the incumbering of the record with a mass of matter which is absolutely immaterial to

(Deposition of Arthur G. Willard.)

the issues of this interference.

A. Liner pump.

Q. 278. (By Mr. BLAKESLEE.) What kind of a pump is Mr. Bole's?

A. Liner pump.

Q. 279. Do you know whether they were working together at the same time, Mr. Barnes and Mr. Bole?

A. Mr. Bole was working for Mr. Barnes. Mr. Barnes was foreman of the Bakersfield Iron Works at the time.

Q. 280. Who was working on the liner pump first, Barnes or Bole?

Mr. LYON.—Objected to as irrelevant and immaterial.

A. I don't know.

Q. 281. (By Mr. BLAKESLEE.) Did you ever see the liner pump of Mr. Barnes?

A. Yes, sir.

Q. 282. How did it compare with the pump of Mr. Bole which he patented?

Mr. LYON.—Same objection as last noted, and incompetent, and not the best evidence.

A. Both were practically the same except Mr. Bole held his liners in with molten metal, lead or babbitt, and Mr. Barnes' liners were held with collars.

Q. 283. (By Mr. BLAKESLEE.) As far as you know Mr. Bole's invention consisted in pouring babbitt metal in to hold the liners in, instead of using collars?

Mr. LYON.—Objected to as incompetent, irrele-

(Deposition of Arthur G. Willard.)

vant and immaterial, and not the best evidence, and the witness is not qualified to answer the question.

A. Mr. Bole's patent claimed in his patent he mentioned the metal for holding the liners. [306—248]

Mr. LYON.—Move to strike the answer from the record and exclude it from consideration, and again protest against the incumbering of the record with a mass of immaterial matter.

Q. 284. (By Mr. BLAKESLEE.) Do you know when Mr. Bole applied for that patent?

A. No, sir.

Q. 285. Do you know whether Mr. Barnes had tried anything else for holding in the liners?

Mr. LYON.—Objected to as incompetent, irrelevant and immaterial to the issues of this interference.

A. He tried liquid.

Q. 286. (By Mr. BLAKESLEE.) And Mr. Bole substituted babbitt metal?

Mr. LYON.—Objected to as incompetent, irrelevant and immaterial, leading, and without the issues of this interference.

A. I don't know whether Mr. Bole used the babbitt before Mr. Barnes used the liquid or not.

Q. 287. (By Mr. BLAKESLEE.) Do you know what the liquid was that Mr. Barnes was putting back of his liner?

A. The oil.

Q. 288. You don't know of any other patent

(Deposition of Arthur G. Willard.)

which was ever issued to Mr. Bole than this pump patent?

Mr. LYON.—Objected to as immaterial and irrelevant.

A. No, sir; I know he has a number of applications.

Q. 289. From your knowledge of the business of the Wilson & Willard Manufacturing Company and the oil well tools in general, which do you consider the best device for holding the lower end of the spring in the Wilson under-reamer, the 2-piece key, the block and screws, or the pins, or the single-piece key? A. The single-piece key.

Q. 290. For what particular reasons? [307—249]

A. It is easier to assemble and easier to take apart, stronger, more durable, and gives less trouble to the operator.

Q. 291. Is anything particular used in withdrawing the key for the Wilson under-reamer?

A. I believe they use some kind of a tapered pin.

Q. 292. When did you first see such a device?

A. Soon after they made the first under-reamer with the single-piece key.

Q. 293. Do you know who suggested that device?

A. No, sir. [308—250]

OFFICE OF RAYMOND IVES BLAKESLEE,
California Building,

Los Angeles, Cal., Wednesday, June 24, 1914.

10 o'clock A. M.

This being the time and place to which the further

(Deposition of Arthur G. Willard.)

taking of proof on behalf of Wilson was continued, proceedings are now resumed.

Present:—FREDERICK S. LYON, Esq., for Bole.
RAYMOND IVES BLAKESLEE, Esq.,
for Wilson.

A. G. WILLARD, recalled for further direct examination, by consent, prior to the cross-examination, testified as follows:

Direct Examination.

(By Mr. BLAKESLEE.)

Q. 294. How frequently was it the custom, as among yourself, Mr. E. C. Wilson, Mr. W. W. Wilson, Mr. Robert E. Bole and Mr. William G. Knapp and others, acquainted with the general conduct of the business of the Wilson & Willard Manufacturing Company, during the last few years you were an officer of that company, to confer as to the various matters of the shop and business end of the affairs for that company?

Mr. LYON.—Objected to as assuming that there was any custom in this regard whatsoever. The witness has not so testified, nor is there any testimony or proof of any such custom on the record.

Mr. BLAKESLEE.—The record clearly shows the testimony of this witness.

A. Several conferences, from time to time, regarding various subjects, except the management of the Wilson & Willard Manufacturing Company, which was conducted by Mr. E. C. Wilson and A. G. Willard, exclusively. [309—251]

Q. 295. Do you remember any such conference

(Deposition of Arthur G. Willard.)

taking place with respect to the under-reamer construction at or about the time when you say this first Wilson single-piece key under-reamer was finished at the shop of the Wilson & Willard Manufacturing Company?

Mr. LYON.—Objected to as leading, as the question particularly sets forth the date, the date being one of the material questions at issue.

A. There were several conferences about that time in which Mr. R. E. Bole and Mr. E. C. Wilson and Mr. W. W. Wilson and Mr. W. G. Knapp took part.

Q. 296. (By Mr. BLAKESLEE.) You remember Mr. Charles E. Wilcox, a salesman of the company, being present at any such conference?

Mr. LYON.—Objected to as leading.

A. I do not.

Q. 297. (By Mr. BLAKESLEE.) Do you remember anything that was said at any such conference with respect to the changing over or modifying the construction of the Wilson under-reamer?

Mr. LYON.—Objected to as leading and calling for a conclusion of the witness and not the proper method of proof in proving a conversation.

A. I remember Mr. Wilson's suggesting about the enlarging the slotted tee bar.

Q. 298. (By Mr. BLAKESLEE.) Do you remember anything further in this connection?

Mr. LYON.—The same objection.

A. No; I don't know as I do.

Q. 299. (By Mr. BLAKESLEE.) Are you able to state positively and conclusively that you were

(Deposition of Arthur G. Willard.)

not present at such a conference when the question of the adoption of the single-piece key of the Wilson under-reamer was discussed?

Mr. LYON.—Objected to as leading and calling for a conclusion [310—252] of the witness, incompetent, not the proper method of proof.

A. No, sir.

Q. 300. (By Mr. BLAKESLEE.) That is, I understand you are not positive but what you were—that is, you won't say absolutely that you were not. Is that correct?

Mr. LYON.—The same objection.

A. Yes, sir.

Q. 301. (By Mr. BLAKESLEE.) About the time of making over the Wilson under-reamer to turn out the first single-piece key Wilson under-reamer, what part of the shop work were you most particularly interested in? That is, what devices as manufactured there at that time most particularly concerned yourself?

Mr. LYON.—Objected to as assuming facts not appearing from the record and leading.

A. The Bole pump, the Willard circulating-head and possibly the Willard-Wilcox rotary.

Q. 302. (By Mr. BLAKESLEE.) What products of the shop was Mr. E. C. Wilson more particularly interested in at that time?

A. Wilson under-reamer, the Wilson casing elevator and the Wilson casing spear.

Q. 303. When you looked up the shop records, as you have testified, of two or three years ago, to

(Deposition of Arthur G. Willard.)

attempt to locate whatever was sent in, as you have testified, with the order of Mr. Bole for a 9 5/8 inch Wilson under-reamer, extra set of cutters for 10-inch and 12 Bole pumps, and the Bole casing spear, and you couldn't find any written requisition or order from Mr. Bole, did you find anything else connected with these matters?

A. The records of the Wilson & Willard Manufacturing Company showed that an order had been received for the under-reamer, pumps and casing spear. The original order, however, was missing.

Q. 304. Did you find in the records of the Wilson & Willard Manufacturing Company when you made such search anything whatsoever [311—253] showing the receipt of any such order for any such devices or things from Mr. Bole?

Mr. LYON.—Objected to as leading.

A. No, sir.

Q. 305. (By Mr. BLAKESLEE.) You have testified that accompanying that order, or in connection with that order, there was some suggestion regarding the changing of a Wilson under-reamer. When you made this search which you have testified two or three years ago, did you find in the records of the Wilson & Willard Manufacturing Company anything pertaining in any manner to any such suggestion?

Mr. LYON.—Objected to as leading.

A. No, sir.

Q. 306. (By Mr. BLAKESLEE.) Did you ever make any other search for such order from Mr.

(Deposition of Arthur G. Willard.)

Bole or for any paper or other thing, letter, sketch or the like, pertaining to any such order?

A. I may have.

Q. 307. Do you remember making any further search among the records of the Wilson & Willard Manufacturing Company? A. I am not positive.

Q. 308. And do you remember having at any time ever seen any such thing pertaining to any such order after the time you say the order was received?

Mr. LYON.—Objected to as leading.

A. No, sir.

Q. 309. (By Mr. BLAKESLEE.) Do you remember approximately the date at which Mr. Charles E. Wilcox entered the employment of the Wilson & Willard Manufacturing Company?

A. No, sir.

Q. 310. Can you give an approximate date at which you first saw Mr. Wilcox in the shop or office of the Wilson & Willard Manufacturing Company?

A. September or October, 1910 or 1911. I remember it was in the fall. [312—254]

Q. 311. Which year do you think it was?

A. 1910.

Q. 312. How frequently did you see Mr. Wilcox in that shop after that time for the next few years?

A. Almost every day unless he was out of the city on business. He had charge of the Taft store, was up there for several months.

Q. 313. What did he sell at the Taft store?

A. Wilson under-reamers and elevators, principally.

(Deposition of Arthur G. Willard.)

Q. 314. To your knowledge how many Wilson under-reamers, conservatively stated, has Mr. Wilcox sold for the Wilson & Willard Manufacturing Company? A. To date?

Q. 315. Yes. To your knowledge, of course. The last year you may not know.

A. That is a pretty hard question to answer.

Q. 316. I don't care within a hundred or fifty. Put an outside figure at which you can safely give it.

Mr. LYON.—We object on the ground that it is evident that it would be a mere guess or conclusion on the part of the witness, and on the further ground that it is irrelevant and immaterial.

A. It would be purely a guess.

Q. 317. (By Mr. BLAKESLEE.) Well, do you know of Mr. Wilcox having sold any Wilson under-reamers? A. Yes, sir.

Q. 318. And during what years?

A. 1911, 1912 and 1913.

Q. 319. When did you first hear that Mr. Bole had filed an application for patent which is involved in these proceedings?

A. At the time Mr. Bole filed the application.

Q. 320. Did you ever mention having received such information to Mr. E. C. Wilson?

Mr. LYON.—Objected to as leading. [313—255]

A. Yes, sir.

Q. 321. (By Mr. BLAKESLEE.) At how early a date?

A. I don't just remember when I first mentioned the fact.

(Deposition of Arthur G. Willard.)

Q. 322. Was it before the patent to Mr. Bole issued, do you remember?

Mr. LYON.—Objected to as leading.

A. Yes, sir.

Q. 323. (By Mr. BLAKESLEE.) As to this one particular order you have testified about, namely, the one which you say Mr. Bole sold to the Snuset-Monarch Oil Company for the 9-inch Wilson reamer and 10-inch cutters, do you remember who was opening the mail of the Wilson & Willard Manufacturing Company at the time you say that order was received?

Mr. LYON.—Objected to as having been already answered by the witness and having been fully gone into on direct examination when this witness was on the stand on June 19, 1914.

A. W. W. Wilson or myself.

Q. 324. (By Mr. BLAKESLEE.) Was either of you opening most of the mail at about that time, or did you equally divide this work?

A. I usually opened the mail if I was there.

Q. 325. For how long a period of time?

A. Until the arrival of E. C. Wilson from Bakersfield.

Q. 326. When you opened up the mail and there were any orders in it, what was your general custom at that time as to such orders?

A. Have them entered up.

Q. 327. And what was done with the original instructions or orders received through the mail?

A. The instruction was to file all written orders

(Deposition of Arthur G. Willard.)

with the shop order.

Q. 328. Who attended to such filing?

A. W. W. Wilson.

Q. 329. Then do I understand that both you and Mr. Wilson were [314—256] accustomed to handle or inspect or file, between you, any such orders received during that period? A. Yes, sir.

Q. 330. And how often did Mr. W. W. Wilson open the mail during that general period of time?

A. It is pretty hard to say. I don't know as there were any particular instructions who was to open the mail or who was not. It just happened; that is all. There was no objection to W. W. Wilson opening the mail.

Q. 331. Was it then, if I am correct, a matter of who happened to be first at the office or who happened to be at the office when the mail came in as to who opened it?

Mr. LYON.—Objected to as leading.

A. Yes, sir.

Q. 332. (By Mr. BLAKESLEE.) The orders came in by mail at various parts of the day during the years 1908 and 1909?

Mr. LYON.—Objected to as leading.

A. There were two deliveries—morning and afternoon.

Q. 333. (By Mr. BLAKESLEE.) And orders came in occasionally in the afternoon?

A. Yes, sir.

Q. 334. You are considerable of a baseball enthusiast? A. Yes, sir.

(Deposition of Arthur G. Willard.)

Q. 335. Were you during those years?

A. Yes, sir.

Q. 336. And were you occasionally at afternoon sessions of the ball game during those years?

A. Yes, sir.

Q. 337. I show you a pencil sketch on a yellow sheet of paper, concealing the written matter on the sketch, and ask you if you know what it shows.

Mr. LYON.—Objected to as leading, the witness not having qualified [315—257] to answer the question, it not being shown that the witness has ever seen the particular sketch before, and the history of the sketch shown in this record shows that it could not have been seen by him unless it was shown him prior to his taking the stand here this morning.

A. It is the sketch of a lever.

Q. 338. (By Mr. BLAKESLEE.) Have you ever seen that sketch before? A. I don't know.

Q. 339. To the best of your recollection have you ever seen it before?

Mr. LYON.—You mean this particular one?

Mr. BLAKESLEE.—Yes.

A. I don't know.

Q. 340. Have you seen this sketch since the beginning of the taking of testimony in this case?

A. No, sir.

Q. 341. What kind of a lever is that, if you know?

A. It could be used for a number of things.

Q. 342. Was there ever any such lever used in the shop of the Wilson & Willard Manufacturing

(Deposition of Arthur G. Willard.)

Company for any purpose, to your knowledge?

Mr. LYON.—Objected to as leading.

A. I have seen levers of that description; yes, sir.

Q. 343. (By Mr. BLAKESLEE.) What were they used for?

A. Used in connection with the Wilson under-reamer.

Q. 344. And for what purpose?

A. Prying up the spring and inserting the key.

Q. 345. What was such lever applied to in this case? A. Applied in the slot of the under-reamer.

Q. 346. And what was it applied against?

A. A washer on the tee bar underneath the spring.

[316—258]

Q. 347. When did you first see such a lever at that shop? A. 1907.

Q. 348. And when after that, if at all?

A. There may be some around there yet.

Q. 349. Just mention the years in which you recollect seeing such levers, or such a lever, at that shop. A. 1907 to 1913.

Mr. BLAKESLEE.—That is all. Let it be noted that the witness has been referring in discussing the pencil sketch and yellow paper to Wilson Exhibit W. W. Wilson Key Extractor Sketch.

Cross-examination.

(By Mr. LYON.)

Q. 350. What, Mr. Willard, was the purpose of the projection or hump which I now mark with an X on the sketch last shown you?

A. Used as a heel on the lever.

(Deposition of Arthur G. Willard.)

Q. 351. These levers which you say you saw which conformed in a general way to this sketch were used with the old-style Wilson reamers for lifting the spring of the reamer? A. Yes, sir.

Q. 352. During what operation? The assembling or removal? A. The assembling.

Q. 353. And for what purpose was the spring lifted by means of these levers in such reamer or reamers? A. To insert the keys.

Q. 354. You mean by the "key" in your last answer the plug which was held in by the—the block or plug which is held in by screws, do you?

A. They could be used with either the key type or block type.

Q. 355. Was this type of lever used with both of these types for the purpose of assembling the reamer? A. You could use them. [317—259]

Q. 356. Do you know whether such levers were ever used with either of such types or under-reamers for that purpose?

A. They were used in the shop.

Q. 357. For the purpose of assembling the under-reamers? A. Yes, sir.

Q. 358. Do you refer to the double-key type of under-reamer in these last answers?

A. The double-key type, yes, sir.

Q. 359. And they also used this general type of lever in assembling the plug and screw type of Wilson reamer? A. Yes, sir.

Q. 360. Do you remember what kind of a tool was furnished with these reconstructed reamers like

(Deposition of Arthur G. Willard.)

120 which was shipped to the Norbeck & Nicholson Company at Edgemont, South Dakota?

A. You refer to the tool that was used to—

Q. 351. To lift the single-piece key.

A. No, sir.

Q. 362. Do you remember what kind of a single-piece key, or what shape it was, that was used in that reconstructed reamer No. 120 as it was shipped to the Norbeck & Nicholson Company?

A. I don't remember the shape of the key, except that it was in one piece.

Q. 363. In September, 1908, Mr. Robert E. Bole left the Wilson & Willard Manufacturing Company to go to Maricopa, California, to take charge of the shop of the Sunset-Monarch Oil Company, did he?

A. Yes, sir.

Q. 364. And afterwards returned to the Wilson & Willard Manufacturing Company?

A. Yes, sir.

Q. 365. And it was while Mr. Bole was away in September, 1908, and had gone north for this purpose, that he sent in this order for the shipment to the Sunset-Monarch Oil Company of this 9 $\frac{5}{8}$ -inch [318—260] Wilson reamer and extra set of 10-inch cutters and Bole spear, was it? A. Yes, sir.

Q. 366. And that order was received before Mr. Bole's return to the Wilson & Willard Manufacturing Company, was it? A. Yes, sir.

Q. 367. And you gave such order to Mr. W. W. Wilson to make out the necessary shop order from?

A. Do you refer to the order received from R. E. Bole?

(Deposition of Arthur G. Willard.)

Q. 368. Yes. A. I don't know.

Q. 369. If I understand your testimony correctly, Mr. Willard, you were not as vitally interested in the under-reamer business of the Wilson & Willard Manufacturing Company as was E. C. Wilson or his brother W. W. Wilson. Is that correct?

A. Yes.

Q. 370. And W. W. Wilson was at the time of the receipt of this order from R. E. Bole the representative of his brother E. C. Wilson in the shop of the Wilson & Willard Manufacturing Company. Is that correct?

Mr. BLAKESLEE.—Objected to as calling for a conclusion.

A. Yes, in a way. That is partly correct. About that time the business had grown so that it was necessary to employ help in the office, and Mr. Wilson sent his brother there and, naturally, he had Mr. E. C. Wilson's interest at heart.

Q. 371. (By Mr. LYON.) This order contained some kind of a sketch of a key device for an under-reamer as ordered, did it? A. Yes, sir.

Q. 372. Such order also was for a Wilson under-reamer of the slotted tee bar, was it?

A. Yes, sir. [319—261]

Q. 373. You were not at that time manufacturing the Wilson under-reamer with slotted tee bar and 2-piece key, were you? A. Yes, sir.

Q. 374. The order for this particular under-reamer with the single-piece key, as sent in by Mr. Bole and received at the Wilson & Willard Manufac-

(Deposition of Arthur G. Willard.)

turing Company's shop between the 12th and 20th of September, 1908, called for a larger diameter tee-bar than you had been furnishing with such 9 $\frac{5}{8}$ -inch Wilson under-reamers at that time. Is that correct?

Mr. BLAKESLEE.—Objected to as assuming definitely the date of the receipt of this order which has not been testified to by the witness.

A. I don't remember.

Q. 375. (By Mr. LYON.) I believe you have stated that you do not now remember definitely just what this sketch of the key device with that order comprised or showed. Is that correct?

A. Yes.

Q. 376. At this time in September, 1908, when this order to ship to the Sunset-Monarch Oil Company this 9 $\frac{5}{8}$ reamer was received by the Wilson & Willard Manufacturing Company from Robert E. Bole, what connection, if any, did you have with the under-reamer business? Please explain it.

A. I was in charge of the shop of the Wilson & Willard Manufacturing Company, which at that time was manufacturing all of the Wilson under-reamers.

Q. 377. Did you have anything whatever to do with the design or any authority to make any changes in design of the Wilson under-reamer at that time?

A. No, sir.

Q. 378. When any orders or suggestions were received by the Wilson & Willard Manufacturing Company of either special types [320—262] or

(Deposition of Arthur G. Willard.)

construction of the Wilson under-reamers or suggested changes therein, what was done with them?

A. Referred to E. C. Wilson.

Q. 379. It was part of your custom, then, at that time to report to Mr. E. C. Wilson in regard to such under-reamer business and to send to him for his personal attention any special matters which arose in connection with the under-reamers?

A. Yes, sir. They were sent to him or called to his attention by letter.

Q. 380. Have you any distinct recollection as to whether you personally gave this order received from Robert E. Bole for the Sunset-Monarch Oil Company, and to which we have referred, to Mr. E. C. Wilson or sent it to him at Bakersfield?

A. No, sir.

Q. 381. If I understand your testimony correctly, however, following your general custom, and such order being special and out of the general line, some notice of such order either by sending the order itself or calling particular attention to it would have been given to E. C. Wilson on account of his special interest in the under-reamer business. Is that correct?

Mr. BLAKESLEE.—Objected to as calling merely for a conclusion and not inquiring into facts, and calling merely for a guess of the witness.

A. Yes, sir.

Q. 382. (By Mr. LYON.) Do you remember what time in 1908 Mr. E. C. Wilson came to Los Angeles and took charge of the work of the Wilson

(Deposition of Arthur G. Willard.)

& Willard Manufacturing Company?

A. No, sir.

Q. 383. If I understand you correctly, your recollection as to dates does not enable you to positively fix the year 1908 as the time when Mr. E. C. Wilson did remove from Bakersfield to Los [321—263] Angeles, and did take charge of the affairs of the Wilson & Willard Manufacturing Company here.

A. Yes, sir.

Q. 384. In your answer to question No. 66, which question referred to Robert E. Bole, you say, "He was on a friendly basis with everyone in the shop, or at least in the control and management of the shop, during 1911 and 1912"? You said "A. With the management, yes." Was there, then, some friction or jealousy or feeling of some kind between the pump gang employed upon the manufacture of Bole pumps and the other workmen employed upon the under-reamers and other devices in the shop of the Wilson & Willard Manufacturing Company at that time? A. Yes; there was some friction.

Q. 385. Have you any knowledge of the records of the Wilson & Willard Manufacturing Company since your sale of your stock in such company to E. C. Wilson? A. No, sir.

Q. 386. Then you do not know whether at the present time such records are complete?

A. No, sir.

Q. 387. Approximately when was it that you sold your stock in the Wilson & Willard Manufacturing Company to E. C. Wilson?

(Deposition of Arthur G. Willard.)

A. April 1, 1913.

Q. 388. And that was how long after Mr. Bole left the Wilson & Willard Manufacturing Company?

A. A couple of months, I guess.

Q. 389. E. C. Wilson is still owing you a large sum of money on notes given you as consideration for the sale of your stock to him in the Wilson & Willard Manufacturing Company, is he?

A. Yes, sir.,

Q. 390. And the dates of maturity of such notes extend over a very considerable period in the future?

[322—264] A. Yes, sir.

Q. 391. The Wilson & Willard Manufacturing Company are manufacturing the so-called Wilcox & Willard rotary, or rotary drilling apparatus, on a royalty basis? A. Yes, sir.

(By consent of counsel an adjournment is now taken until half past one of this day and at this place.) [323—265]

OFFICE OF RAYMOND IVES BLAKESLET
California Building,

Los Angeles, Cal., Wednesday, June 24, 1914.

2 o'clock P. M.

This being the time and place to which the further taking of proof on behalf of Wilson was continued, proceedings are now resumed.

Present:—FREDERICK S. LYON, Esq., for Bole
RAYMOND IVES BLAKESLEE, Esq.,
for Wilson.

(Deposition of Arthur G. Willard.)

ARTHUR G. WILLARD, recalled.

Cross-examination (Continued.)

(By Mr. LYON.)

Q. 392. You are to receive one-half such royalty?

A. Yes, sir.

Q. 393. You stated, I believe, that you had no authority in 1908 to make any changes in the Wilson under-reamer; is that correct?

A. I had no authority to make changes without the consent of E. C. Wilson.

Q. 394. Do you remember what kind of an under-reamer this Sunset-Monarch Oil Company order sent in by Mr. Bole, to which you have referred in your cross-examination, was filled with?

A. The same type reamer we were manufacturing at that time

Q. 395. That was the 2-piece key type?

A. Yes, sir.

Q. 396. How long after that was it that the Wilson & Willard Manufacturing Company reverted back to the block-and-screw plugs [324—266] type of reamer in the manufacture of the Wilson reamer?

A. Without referring to the shop records I would say from one to two years.

Q. 397. Do you mean that they continued to manufacture the 2-piece key device type of reamers in 1909?

A. It is barely possible; I could not tell without referring to the records.

Mr. BLAKESLEE.—We move that the answer of

(Deposition of Arthur G. Willard.)

the witness be stricken from the record and excluded from consideration as it is apparently merely a guess.

Q. 398. What reason was there why this order of the Sunset-Monarch Oil Company for this 9 $\frac{5}{8}$ -inch under-reamer was not filled with an under-reamer corresponding to the sketches or sketch contained in Mr. Bole's letter, and such order, if you know?

Mr. BLAKESLEE.—Objected to as assuming a matter not testified to.

A. The suggested changes did not appear to get the approval of Mr. E. C. Wilson.

Mr. BLAKESLEE.—We move that this answer be stricken from the record and excluded from consideration, as it is apparent from the testimony of the witness that no definition has ever been given as to any such suggested changes, therefore it is not capable of use in any respect by the testimony in this case.

Q. 399. (By Mr. LYON.) To refresh your recollection, Mr. Willard, do you remember any conversation that you had with Mr. Bole after Mr. Bole's return from Maricopa, and after the receipt of this order from Mr. Bole for the shipment of this 9 $\frac{5}{8}$ inch under-reamer to the Sunset Monarch Oil Company in which conversation you stated to Mr. Bole that you had submitted his order and sketch to Mr. E. C. Wilson?

A. I remember very distinctly having a conversation with Mr. [325—267] Bole regarding the fulfillment of the order, but I don't remember whether I told him I had referred the sketch to Mr. E. C. Wil-

(Deposition of Arthur G. Willard.)

son. I know Mr. Bole was very much disappointed at the time because the reamer was not shipped as he had ordered it, he so informed me, and said that in all probability the reamer would be returned.

Q. 400. You are not prepared to state at this time that in that conversation you did not state to Mr. Bole that you had sent his letter and the sketch to Mr. Wilson, are you? A. No, sir.

Q. 401. Why is a removable key device or means for readily removing the spring-actuated rod or tee bar requisite in the Wilson under-reamer?

A. It is necessary in order to simplify the taking apart or assembling of the reamer.

Q. 402. When is it necessary or desirable to take apart such under-reamer?

A. In changing the cutters or substituting new ones or dressing the old ones.

Q. 403. Is that frequently required in the use of such under-reamer? A. Yes, sir.

Q. 404. Based upon your experience both in the operation of under-reamers and in the manufacture thereof, would you say that such Wilson under-reamer with the 1-piece key device, as for example Wilson Exhibit Wilson Reamer No. 255, here on the floor before you, would be a practical tool if, and assuming that, the 1-piece key could not be removed?

A. No, sir.

Q. 405. You have had some experience, have you, with the use of under-reamers?

A. Yes, sir. [326—268]

Q. 406. To what extent?

(Deposition of Arthur G. Willard.)

A. Manufactured them for the last twelve or fourteen years, have two or three patents of my own covering under-reamers.

Q. 407. Have you had any opportunity for observing the actual use of such tools in operation?

A. I have seen them used, yes, sir.

Q. 408. Are you prepared to say positively, Mr. Willard, that the sketch of the key device which accompanied Mr. Bole's letter and order for the 95/8 inch under-reamer for the Sunset Monach Oil Company in September, 1908, and to which we have already referred several times in this cross-examination, was not a sketch of a single-piece key substantially identical with the single-piece key in Wilson's Exhibit Wilson Reamer No. 255, and illustrating in substantially the same relations as such key exists in such reamer exhibit?

Mr. BLAKESLEE.—Objected to as calling for a mere repetition of testimony, the witness having already testified that he does not know what the sketch showed.

Mr. LYON.—That is not this question.

Mr. BLAKESLEE.—If there were such a sketch.

A. No, sir.

Q. 409. (By Mr. LYON.) Early in January, 1911, Mr. Robert E. Bole and Mr. E. C. Wilson had a number of conversations with reference to the changing of the means for supporting the tee bar in the under-reamer body of the Wilson reamer, did they?

A. Not that I know of.

Q. 410. Would the records of the Wilson & Wil-

(Deposition of Arthur G. Willard.)

Willard Manufacturing Company show when Mr. Charles E. Wilcox entered the employ of the Wilson & Willard Manufacturing Company? A. Yes, sir.

Q. 411. What record would so show? [327—269]

A. The ledger would show.

Mr. LYON.—We demand the production of such ledger to be produced in connection with the cross-examination of Mr. Fahnestock.

Mr. BLAKESLEE.—We will consider the demand.

Q. 412. (By Mr. LYON.) You had knowledge in March, 1913, that E. C. Wilson was making the application for patent involved in this interference and upon this 1-piece key device for the Wilson reamer, had you? A. Yes, sir.

Q. 413. And it was prior to the time that Mr. Wilson made such application that Mr. Bole informed you that he had made an application for patent thereon, wasn't it? A. Yes, sir.

Q. 414. You talked with Mr. E. C. Wilson after Mr. Bole had told you he had made such application and during the time of the taking of the testimony in the under-reamer suit of the Union Tool Company, et al, versus the Wilson & Willard Manufacturing Company, about the time that Mr. Robert E. Bole gave his testimony therein, and discussed or mentioned to Mr. E. C. Wilson that Robert Bole had filed or was about to file such an application upon such 1-piece key device for the Wilson under-reamer?

A. I don't remember the exact date.

(Deposition of Arthur G. Willard.)

Mr. BLAKESLEE.—In view of the answer of the witness we ask that this answer and the previous answer be stricken from the record and excluded from consideration, it being evident that the witness does not remember when he told Mr. Wilson about the proposed Bole application, and therefore this testimony is nothing more than a guess on the part of the witness.

Q. 415. (By Mr. LYON.) This conversation last referred to was had between Mr. E. C. Wilson and yourself during the taking of the testimony in said under-reamer suit? [328—270]

A. I don't remember that, either.

Q. 416. After Mr. E. C. Wilson had ordered prepared the application for patent involved in this interference, you called at the office of Mr. Raymond Ives Blakeslee and had an interview with him, did you? A. Yes, sir.

Q. 417. And you told Mr. Blakeslee at that time that you understood that E. C. Wilson was filing an application on such single-piece key device for the Wilson under-reamer and that if they expected any assistance from you in proving that Mr. E. C. Wilson was the inventor of such 1-piece key device for the Wilson under-reamer, they would be mistaken, as it was always your belief that Robert E. Bole was the inventor thereof, did you?

A. I don't remember the conversation; no, sir.

Q. 418. Did you not have such a conversation, substantially of that substance, with Mr. Blakeslee?

A. The substance of any conversation I had with

(Deposition of Arthur G. Willard.)

Mr. Blakeslee was to the effect that I would be of very little assistance in helping him to prove that Mr. Wilson was the inventor of the key. That is the substance of the conversation.

Q. 419. Did you not tell Mr. Robert E. Bole you had had such a conversation?

A. It is possible.

Q. 420. Did you not tell Mr. Robert E. Bole you had told Mr. Blakeslee it had always been your belief that he, Robert E. Bole, was the inventor of such 1-piece key device for the Wilson under-reamer?

A. No, sir.

Q. 421. Did you not tell Robert E. Bole on more than one occasion that down deep in your heart you believed he, Robert E. Bole, to be the original and first inventor of such 1-piece key [329—271] device for the Wilson under-reamer? A. No, sir.

Q. 422. I show you a bundle of papers marked Bole's Exhibit Wilson & Willard Manufacturing Company Monthly Reports of Bole Pump Company account for identification, and ask you if you have ever seen these before, or the duplicates or triplicates, or originals. thereof. A. Yes, sir.

Q. 423. What are they?

A. Monthly reports of the Bole Pump Account.

Q. 424. Do you know the circumstances under which they were made up?

A. At the suggestion of Mr. Bole.

Q. 425. Under whose direction?

A. Under mine, I guess.

Q. 426. A copy of these was given to Mr. Bole,

(Deposition of Arthur G. Willard.)

a copy to you and a copy to Mr. E. C. Wilson?

A. A copy to Mr. Bole, one to me, and I think a copy was kept for the shop records.

Q. 427. Do you know these to be true and correct statements of such account during the time and dates mentioned in such accounts?

A. I believe them to be.

Q. 428. Did you so believe them to be at the time they were made out? A. Yes, sir.

Mr. LYON.—We offer this in evidence in connection with the cross-examination of this witness, Bole's Exhibit Wilson & Willard Monthly Reports of Bole Pump Company Account, the same being the same accounts and reports identified by the witness Laura Dauphine. I show you nine more papers and ask you if you ever saw these or [330—272] the originals or duplicates of them. If so, state what they are.

Mr. BLAKESLEE.—We caution the witness to carefully examine each of these, if he is to identify distinctly as to the full showing of each.

Mr. LYON.—We object to counsel for Wilson prompting the witness.

A. Yes, sir; these are the monthly reports of the Bole Pump Company account, being May, 1908, to August, 1909, and September 1, to 30, 1909.

Q. 429. Were these made up under your directions? A. Yes, sir.

Q. 430. And were true and correct statements of such account at the time rendered?

A. To the best of my belief; yes, sir.

(Deposition of Arthur G. Willard.)

Mr. LYON.—We ask that this be marked Bole's Exhibit Willard Cross-Examination Bole Pump Company Account Reports, and they are offered in evidence in connection with the cross-examination of this witness.

(The document so offered in evidence is marked as requested, together with the title of the court and cause and the date upon which said exhibit was offered in evidence.)

Q. 431. (By Mr. LYON.) You stated in answer to question No. 188 that the settlement between Mr. Bole and the Wilson & Willard Manufacturing Company was, by means of a contract in writing, and now I show you a paper and ask you if you know what the same is.

A. It is an agreement between Robert E. Bole and the Wilson & Willard Manufacturing Company for the settlement of what is known as the Bole Pump Company account.

Q. 432. That is the contract you referred to in the answer to which I have just directed your attention?
[331—273] A. Yes, sir.

Mr. LYON.—Let the record show that the instrument handed to the witness was Bole's Exhibit W. W. Wilson Cross-examination Exhibit 1 for identification.

Q. 433. Were you familiar with the financial condition of the Wilson & Willard Manufacturing Company in December, 1912, and January and February, 1913? A. Yes, sir.

Q. 434. Is it a fact that said company was, like

(Deposition of Arthur G. Willard.)

many other concerns engaged in the oil well business, pressed for ready cash funds during those months?

A. I don't know without looking up the records.

Q. 435. Do you know what occasioned the pressing of Mr. E. C. Wilson for a settlement by Mr. Bole, of the Bole Pump Company account, in December, 1912, and January, 1913? If so, please state.

Mr. BLAKESLEE.—Objected to as calling for a conclusion of the witness. The witness has testified that the account was in arrears. That is the usual reason for pressing an account.

Mr. LYON.—We object again to counsel for Wilson interrupting the cross-examination of this witness and making suggestions under the guise of objections as not proper procedure, and we call particular attention to such conduct on the part of Wilson.

Mr. BLAKESLEE.—We will let the rational interruptions of counsel for Wilson be compared with the many and multitudinous objections which manifestly were without proper foundation upon any fair and proper consideration of the rules of evidence and which added materially to the expense of the party Wilson in this case, and can only be considered as further evidence of the animus developed in the proofs taken for the party Wilson.

A. Mr. Wilson was in charge of the office at the time and looked after the collections. He stated to me on a number of [332—274] occasions, that he did not approve of Mr. Bole's methods of doing business, and that the account as it appeared on the books

(Deposition of Arthur G. Willard.)

was more than the Wilson & Willard Manufacturing Company could afford to allow to remain there, and that he intended to insist upon a settlement of the account.

Q. 436. (By Mr. LYON.) During all that time the Wilson & Willard Manufacturing Company records show that the Wilson & Willard Manufacturing Company had full access to all the records of the Bole Pump Company account, including the stock of merchandise on hand, did it? A. Yes, sir.

Q. 437. On Tuesday, the 16th of June, 1914, you were at the baseball game at Los Angeles, California, between the so-called Venice Tigers and the Angels of the Pacific Coast League in company with Mr. Robert E. Bole, were you—that is a week ago yesterday? A. Yes, sir.

Q. 438. And while watching such game you had some conversation with Mr. Bole in regard to this Sunset-Monarch Oil Company order for this 9 $\frac{5}{8}$ inch under-reamer sent in by Mr. Bole in September, 1908, did you? A. It is barely possible.

Q. 439. In such conversation Mr. Bole referred to your talk with Mr. Blakeslee, Mr. Wilson's attorney, to which conversation I have already alluded in cross-examination this afternoon, did he?

A. I think it was discussed; yes, sir.

Q. 440. Did you not at that time say to Mr. Bole that "down deep in my heart I always believed that you were the inventor of the 1-piece key"?

A. No, sir.

Mr. BLAKESLEE.—Objected to as having been

(Deposition of Arthur G. Willard.)

already testified to [333—275] by the witness this afternoon.

Q. 441. And didn't Mr. Bole ask you the following question after you went up and had that talk with Blakeslee he must have thought he was in bad, and you answered "Yes, I guess so"? A. No, sir.

Q. 442. You swear positively you did not make that statement at that time? A. Yes, sir.

Q. 443. Can you state what the conversation was that you had with Mr. Bole that day in reference to such conversation with Mr. Blakeslee?

A. As I have previously testified I told Mr. Bole that I had told Mr. Blakeslee that I would be of little assistance to either one of them in proving who was the inventor of this key.

Q. 444. Is that all you said in that conversation?

A. Along that same line of talk.

Q. 445. Referring now to the so-called 2-piece key under-reamers that are manufactured by the Wilson & Willard Manufacturing Company for or on account of E. C. Wilson, do you remember when the first of such under-reamers were manufactured by said Company? A. 1907.

Q. 446. Were they sold in 1907?

A. Part of them; yes, sir.

Q. 447. How long was such manufacture and sale continued? A. For a year or so after that?

Q. 448. Those under-reamers comprise a hollow body? A. Yes, sir.

Q. 449. Inside the hollow body are a rod or tee bar, movable within the hollow body? A. Yes, sir.

(Deposition of Arthur G. Willard.)

Q. 450. The movement of said rod or tee bar, within the [334—276] hollow body was to permit the expansion and contraction of the cutters for bits?

A. Yes, sir, for the raising or lowering of the bits.

Q. 451. And such under-reamers embraced cutters substantially like the cutters of the Wilson Exhibit Wilson Reamer 255? A. Yes, sir.

Q. 452. And the means for causing the expansion of the cutters in the said rod or tee bar was substantially the same as in said reamer No. 255?

A. Yes, sir.

Q. 453. And substantially as shown in the drawings of the application of Elihu C Wilson, filed in the United States Patent Office March 18, 1913, serial No. 755170, a certified copy of which, certified to by the acting commissioner of patents, I now hand you?

A. Yes, sir.

Q. 454. Comprising a spring, acting upon the said rod or tee bar to move it in one direction, that is, upward within the body? A. Yes, sir.

Q. 455. And, what means were provided in such under-reamers for the confining of the spring at one end? A. A key.

Q. 456. Such key was made in two pieces, was it?

A. During the years of 1907 and 1908; yes, sir.

Q. 457. And the upper piece of such key had a wedge action to raise the spring and engage with the hollow body, and the lower portion of the key, as well as the upper portion of the key, were combined in the slot in the rod or tee bar? A. Yes, sir.

Q. 458. The lower portion of such key in such

(Deposition of Arthur G. Willard.)

under-reamer [335—277] had an extension set in the bore of the hollow body?

A. Yes, sir; on one side.

Q. 459. It was to prevent the lateral displacement of the key on that side?

A. That lower half of the key; yes, sir.

Q. 460. During the year 1910, the debit balance of the Bole Pump Company account to the Wilson & Willard Manufacturing Company reached the sum of practically \$10,000, did it?

A. I could not say offhand. I know at about that time it was that the Bole Pump Company account was way behind.

Q. 461. I show you recapitulation sheet for the month of June, 1910, showing such balance to be \$9,907.89, said sheet forming a part of Bole's Exhibit Wilson & Willard Manufacturing Company monthly reports of Bole Pump Company account, and ask you to verify the preceding question and answer.

A. Yes, sir.

Q. 462. At that time you had a strike on at the Wilson & Willard Manufacturing Company?

A. Yes, sir.

Q. 463. Prior to that time Mr. Robert E. Bole had been absent for some time in the field and you called him back from San Diego and he took personal charge of this Bole Pump Company account and matters, and this debit balance was reduced from practically \$10,000 down to a credit balance of \$33.87, as shown by the monthly report or statement for

(Deposition of Arthur G. Willard.)

March, 1911. Is that correct? Please look at such statement, as it forms a part of this exhibit, and answer me. A. Yes, sir; that is correct.

Q. 464. You sold out your interest in this Bole pump business to Mr. Bole in 1912?

A. Yes, sir. [336—278]

Q. 465. It is a fact that the Wilson & Willard Manufacturing Company requested and encouraged Mr. Bole to manufacture and increase the line of his stock during the months succeeding the sale of your interest to Mr. Bole, the purpose thereof being to keep the business and keep the shop of the Wilson & Willard Manufacturing Company and certain portions of the workmen busy? A. Yes, sir.

Q. 466. And it is a fact that one of the reasons why you sold your interest in the Wilson & Willard Manufacturing Company to E. C. Wilson was that you did not think he had treated Mr. Robert E. Bole right in the manner in which he had forced the Bole Pump Company account? A. No, sir.

Q. 467. Did you not so state to Mr. Robert E. Bole? A. Not that I remember.

Q. 468. Will you state that you did not so state?

A. No, sir.

Q. 469. Then this agreement between Mr. E. C. Wilson and Mr. Bole had nothing to do, nothing whatever to do with your sale of your stock in the Wilson & Willard Manufacturing Company?

A. No, sir.

Q. 470. You have nothing but the most friendly feeling toward Mr. E. C. Wilson? A. No, sir.

(Deposition of Arthur G. Willard.)

Q. 471. You are here voluntarily as a witness and without subpoena? A. Yes, sir. [337—279]

Redirect Examination.

(By Mr. BLAKESLEE.)

Q. 472. What efforts were made by the Wilson & Willard Manufacturing Company during 1912 to induce Mr. Bole to continue the Bole Pump Company business as a branch of that of the Wilson & Willard Manufacturing Company?

A. Mr. Wilson wrote Mr. Bole several letters making suggestions as to how he thought that the Bole Pump Company business should be conducted.

Q. 473. Was Mr. Wilson satisfied with the conduction of the Bole Pump business at that time?

A. No, sir.

Q. 474. Did you consider the Bole Pump Company account a safe account at that time?

A. No, sir.

Q. 475. About that time what was the indebtedness of the Bole Pump Company to the Wilson & Willard Manufacturing Company?

A. About \$10,000.

Q. 476. Did you have any interest in the Bole Pump Company account at that time? A. No, sir.

Q. 477. You had at that time, did you, in the Wilson & Willard Manufacturing Company which pertained to the item of this Bole Pump Company account? A. Yes, sir.

Q. 478. In 1910 did you have any interest in the Bole Pump Company account? A. Yes, sir.

Q. 479. And was this true at the time the Bole

(Deposition of Arthur G. Willard.)

Pump Company account showed a debit to the Wilson & Willard Manufacturing Company of about \$10,000? [338—280] A. Yes, sir.

Q. 480. Was there any guarantee of that account to the Wilson & Willard Manufacturing Company in 1910 when substantially this debit amount appeared against the Bole Pump Company account?

Mr. LYON.—Objected to as leading and calling for a conclusion of the witness, and incompetent and not the best evidence.

A. I personally guaranteed the account.

Q. 481. (By Mr. BLAKESLEE.) Was there any guarantee of the Bole Pump Company account in the year 1912?

Mr. LYON.—Same objection.

A. Not that I know of.

Q. 482. (By Mr. BLAKESLEE.) What did Mr. Bole have to do with the management of the Bole Pump Company affairs in the year 1910?

A. You might say he had complete charge of it.

Q. 483. Did you have anything to do with that management?

A. No, sir; Mr. Bole and I were partners in the affair, but I left the whole thing to Bob.

Q. 484. Who took care of the Bole Pump Company matters when he was absent at San Diego or elsewhere? A. I suppose I did.

Q. 485. He attended to the collection of the accounts receivable of Mr. Bole during 1910, did he?

A. It was all paid into the Wilson & Willard Manufacturing Company and the Bole Pump Com-

(Deposition of Arthur G. Willard.)

pany was given credit for it.

Q. 486. Who took charge of the getting in of such funds receivable? A. E. C. Wilson.

Q. 487. What was Mr. Bole doing during the year 1910 with respect to the management of the Bole Pump Company affairs?

A. He made various trips around the field and sold pumps.

Q. 488. Did he do anything beside act as salesman? [339—281]

A. He superintended the construction of the pumps in the shop.

Q. 489. Did he do any of the work on the pumps?

A. Yes, sir; part of the time during the strike I think Mr. Bole made pretty near all of them.

Q. 490. Did you look after the manufacture of the pumps for the Bole Pump Company at all during the year 1910?

A. I gave it very little of my attention.

Q. 491. Did Mr. Bole have anything to do with the clerical or office end of the Bole Pump Company in 1910? A. He kept in touch with it.

Q. 492. Who took care of the correspondence of the company from the office?

A. E. C. Wilson took care of the correspondence regarding the collections. Mr. Bole and myself took care of the correspondence to the various oil companies, principally Mr. Bole.

Q. 493. After you sold out your interest in the Bole Pump Company, did you consider the Bole Company account a safe one on the books of the

(Deposition of Arthur G. Willard.)

Wilson & Willard Manufacturing Company?

A. Yes, sir.

Q. 494. When did you commence to alter your opinion in this respect, as you have testified.

A. When Mr. Wilson insisted upon a settlement.

Q. 495. What was your attitude as to forcing such a settlement?

A. Well, I don't think I was at all insistent that the account be settled. I thought it would turn out all right; it had heretofore.

Q. 496. During 1912 did Mr. Bole make any representation to you personally as to his worth or the value of his assets?

Mr. LYON.—Objected to as leading, irrelevant and [340—282] immaterial to the issues of this interference, the entire controversy with regard to the Bole Pump Company is clearly irrelevant and immaterial to the issues of this interference.

A. I don't know as he did; I always considered that the stock on hand was worth more than he owed the Wilson & Willard Manufacturing Company.

Q. 497. (By Mr. BLAKESLEE.) What do you think the stock of the Bole Pump Company on hand was, toward the latter part of 1912?

Mr. LYON.—Objected to as incompetent and no foundation laid.

A. Do you mean to the Bole Pump Company or the Wilson & Willard Manufacturing Company?

Q. 498. (By Mr. BLAKESLEE.) The stock on hand, of the Bole Pump Company.

Mr. LYON.—Same objection.

(Deposition of Arthur G. Willard.)

A. The stock on hand of the Bole Pump Company would be worth two or three times as much as to any other concern.

Q. 499. (By Mr. BLAKESLEE.) What would it be worth to the Bole Pump Company at that time?

A. If the Bole Pump Company could have made the material up in pumps and sold them there is no doubt but what they could have paid all they owed the Wilson & Willard Manufacturing Company and more too.

Q. 500. What was the valuation of that material and stock on hand in 1912 in its unworked condition?

A. I would not have paid \$2,000 for all of it.

Q. 501. What was the indebtedness of the Bole Pump Company as you remember it to the Wilson & Willard Manufacturing Company in December, 1912? A. \$10,000.

Q. 502. Have you any further reasons for stating that it was your belief that the Bole Pump Company account was a safe one in [341—283] 1912?

A. As I have stated, the account had reached a debit of some \$10,000 and it had worked out all right without practically any more material on hand than Bole had in 1912.

Q. 503. But from the standpoint of the Wilson & Willard Manufacturing Company, did you think that the Bole Pump Company account was as safe an account in 1912 when it showed a debt to the Wilson & Willard Manufacturing Company of approximately \$10,000 as it was in 1910 when it showed the same indebtedness and also at which time you were a

(Deposition of Arthur G. Willard.)

half owner of such business and a guarantor of the account thereof?

Mr. LYON.—Objected to as hypothetical and argumentative and calling for a conclusion of the witness and incompetent and irrelevant and immaterial.

A. No, sir.

Q. 504. (By Mr. BLAKESLEE.) Do you remember making any statement to Mr. E. C. Wilson within the last month that Mr. Bole had represented to you that in 1912 his worth was substantially \$20,000 or thereabouts?

Mr. LYON.—Objected to as leading, irrelevant and immaterial to the issues of this interference.

A. I don't know, he may have made some such statement. As I said before I believed that the material on hand, if it had been worked up into pumps, Mr. Bole would have been able to clear the account and had considerable stock left.

Q. 505. (By Mr. BLAKESLEE.) That, of course, would assume that he received orders for such pumps? A. Yes, sir.

Q. 506. How with respect to the raising of sufficient funds to work over such material and stock into pumps—in the year 1912, what was your knowledge and belief with respect to the worth of Mr. Bole to enable him to obtain such working capital? [342—284]

Mr. LYON.—Objected to as irrelevant and immaterial to the issues of this interference, incompetent, no foundation laid. The witness is not qualified to answer the question, calling for the mere guess and

(Deposition of Arthur G. Willard.)

conclusion of the witness and the question is also to be objected to on the ground that it involves more than one question or inquiry.

A. I have no way of knowing what Mr. Bole's resources were other than the material on hand.

Q. 507. (By Mr. BLAKESLEE.) Then so far as the safety of this account was concerned in 1912 when it showed a debit of substantially \$10,000, did you know of any assets of Mr. Bole rendering, or tending to render such account safe other than the stock and material of some \$2,000 of the Bole Pump Company?

Mr. LYON.—Objected to as leading, irrelevant, immaterial to the issues of this interference.

A. No, sir.

Q. 508. (By Mr. BLAKESLEE.) Are you prepared to say that Mr. Bole did or did not represent to you in 1912, that is to you, as an officer of the Wilson & Willard Manufacturing Company that his worth approximately \$20,000.00?

Mr. LYON.—Objected to as leading, irrelevant and immaterial to the issues of this controversy.

A. I don't remember of ever asking Mr. Bole for a statement of his account; he may have volunteered information, that his business was worth \$20,000.

Mr. LYON.—We move to strike the answer from the record and exclude it from consideration upon each of the grounds stated in the objection to the question and on the further ground that it is not responsive and is a mere conclusion of the witness, and the guess or belief of the witness, and not a statement of fact.

(Deposition of Arthur G. Willard.)

Q. 509. (By Mr. BLAKESLEE.) Had not Mr. Bole been a friend of [343—285] yours in the year 1912, would or would not you have considered the retention of the Bole Pump Company business a safe business prospect, in view of the lot of stock of material, value to that company, and the amount of his indebtedness as testified to by you?

Mr. LYON.—Objected to as leading, and on each of the grounds stated in the objection to the preceding question and the motion to strike the answer from the record and exclude it from consideration.

A. Most certainly not.

Q. 510. (By Mr. BLAKESLEE.) What was the nature of the settlement between yourself and Mr. Bole when you sold your interest in the Bole Pump Company?

Mr. LYON.—Objected to as not cross-examination irrelevant and immaterial to the issues of this interference.

Mr. BLAKESLEE.—We are not attempting to cross-examine the present witness.

Mr. LYON.—Not redirect examination, and cannot be considered much of anything but cross-examination.

A. The whole thing was settled in about five minutes; we figured what the material was worth and I says to Bob, "I will take so much." And Bob says, "I will give you so much," and I says, "All right, I will take it." And that is all there was to it.

Q. 511. (By Mr. BLAKESLEE.) How was the transaction settled, that is, the nature of the deal, in

(Deposition of Arthur G. Willard.)

closing the transaction? I am not asking you as to the amounts, but merely the nature of the deal in closing the transaction?

Mr. LYON.—Objected to as not redirect examination, irrelevant and immaterial to the issues of this interference. A. The sale was covered by notes.

Q. 512. (By Mr. BLAKESLEE.) Were those ever paid?

Mr. LYON.—Same objection. [344—286]

A. Yes, sir.

Q. 513. (By Mr. BLAKESLEE.) Did anybody outside of yourself have any interest in those notes, or the payment of them? A. Yes, sir.

Q. 514. I will ask you, to avoid prying into your personal affairs, if Mr. E. C. Wilson had any interest in the payment of such notes?

Mr. LYON.—Same objection.

A. No, sir.

Q. 515. (By Mr. BLAKESLEE.) Were those notes paid in full?

Mr. LYON.—Same objection.

A. I agreed to the settlement.

Mr. LYON.—We move to strike the answer from the record and exclude it from consideration on the ground stated in the objection and on the further ground it is not responsive to the question.

Q. 516. (By Mr. BLAKESLEE.) At the time of the settlement or attempted settlement with Mr. Bole in 1913, was this matter of these notes given you by Mr. Bole, taken up between yourself and Mr. Wilson in any manner?

(Deposition of Arthur G. Willard.)

Mr. LYON.—Objected to as not redirect examination, as leading, irrelevant, immaterial to the issues of this interference, and on the further ground that inasmuch as the Bole Company account was compromised and settled, any of the negotiations had between the parties with reference to such compromise, are not admissible in evidence in any litigation between the parties.

Mr. BLAKESLEE.—The hearing of this settlement upon the issues in this controversy must be manifest.

A. The notes did not play any part in the settlement.

Q. 517. (By Mr. BLAKESLEE.) Did they enter at all into any arrangement between yourself and Mr. Wilson?

Mr. LYON.—Same objection.

A. I don't think the notes had anything to do with the [345—287] settlement at all.

Q. 518. (By Mr. BLAKESLEE.) Was anything arranged with regard to those notes between yourself and Mr. Wilson at the time of that settlement?

Mr. LYON.—Same objection.

A. Not that I remember, no.

Q. 519. (By Mr. BLAKESLEE.) Does Mr. E. C. Wilson owe you anything to-day on any note given him by you and which has matured prior to the present date?

Mr. LYON.—Objected to as incompetent and not the best evidence.

(Deposition of Arthur G. Willard.)

A. No. sir.

Q. 520. (By Mr. BLAKESLEE.) Do you remember whether or not you ever stated to anybody at any time that no sketch, so far as you could definitely remember, or surely remember, was enclosed with, or connected with the order for a $9\frac{5}{8}$ inch reamer, the cutters, the twelve Bole pump, and the casing spear, which you say Mr. Bole delivered to the Wilson & Willard Manufacturing Company as evidenced by the shop orders of 1908, for the Sunset-Monarch Oil Company?

Mr. LYON.—Objected to as leading, and as an apparent attempt to impeach the testimony of the witness produced by the party Wilson, who called him, and who vouches for him, and upon the further ground that even if impeachment were proper, the question is subject to the further objection that the witness is entitled to have the time fixed, and the place fixed, and the name of the party given with whom such alleged conversation was had.

Mr. BLAKESLEE.—Of the two dilemmas in the objection of counsel and the other objection which he would doubtless urge, that counsel would be leading, if we specified the matters he wishes, we prefer to let the question go as it is, and we further disclaim any intention to impeach the witness; and the question, if carefully considered, will be seen not to tend in that direction, [346—288] taking the previous testimony of the witness into consideration.

Mr. LYON.—The statement of counsel is objected to as not proper procedure, unnecessarily encumber-

(Deposition of Arthur G. Willard.)

ing the record, and counsel for Bole protests against such argumentative and purely unnecessary remarks upon the record.

Mr. BLAKESLEE.—If this voice of protest could be heard over the incumbering objections of counsel for Bole, we shall be willing to have it echo when the case is considered. A. No, sir.

Q. 521. Do you recollect ever having made any similar statement or any statement as to doubt on this head, to Mr. E. C. Wilson?

Mr. LYON.—Same objections as noted in the preceding questions.

A. No, sir.

Q. 522. (By Mr. BLAKESLEE.) How certain are you—and I ask this in order that we may know clearly your best recollection on this head, and I am asking these several questions to determine that,—how certain are you as to the nature of this sketch, for instance, as to the paper it was on?

A. I am not certain at all.

Q. 523. Have you any recollection as to the size of that paper? A. No, sir.

Q. 524. Have you any recollection as to the color of that paper? A. No, sir.

Q. 525. Have you any recollection as to the color of the lines of any such sketch? A. No, sir.

Q. 526. Have you any recollection as to the size of the figure or figures or portions of that sketch?

A. No, sir. [347—289]

Q. 527. Are you sure whether that sketch pertained to the under-reamer mentioned in that order,

(Deposition of Arthur G. Willard.)

or to the casing spear mentioned in that order?

Mr. LYON.—Objected to as leading and suggestive and an apparent cross-examination of the witness by the party producing him, who has vouched for him as a witness.

Mr. BLAKESLEE.—If counsel for Bole fails in his cross-examination to get all the evidence and the best evidence that this witness can give before the Patent Office, we must try, as best we can, to get that evidence, and we are trying to do so fairly.

Mr. LYON.—We object to the statement upon the ground that it is not proper procedure and object to counsel leading his own witness and this objection will be understood as being registered to each and every question asked the witness without the necessity of repeating the same specifically on the record.

A. The sketch pertained to the under-reamer, of that I am quite certain, because the order was placed for the under-reamer with the understanding it would be made as per the enclosed sketch. There was no sketch of the Bole casing spear sent with the order and the casing spear was not manufactured until after Mr. Bole's return.

Q. 528. (By Mr. BLAKESLEE.) Can you give any description at all of what that sketch showed, in part or in whole? A. None whatever.

Q. 529. Have you at any time seen that sketch since the time when you say it was received?

A. No, sir.

Q. 530. Is there any manner in which you can fix

(Deposition of Arthur G. Willard.)

the time at which Mr. Bole returned from Maricopa in 1908?

A. Excepting by the shop records. He returned soon after he sent the order, within the next thirty days, I would say. [348—290]

Q. 531. Have you had any other talks with Mr. Bole regarding your testimony given in this interference, excepting the general conversations referred to in your cross-examination at some ball game or other function?

A. I have had a number of talks with Mr. Bole.

Q. 532. In those talks, what did Mr. Bole say to you with regard to any such key device, single-piece key device for the Wilson reamer?

A. He claimed to have been the inventor of it all along, and said that he had plenty of proof that such was the case.

Q. 533. What sort of proof did he tell you about, if any?

A. He has been very careful to keep it to himself.

Q. 534. What did he say to you further about his claim to inventing this key, about any details of such claim?

Mr. LYON.—Objected to as leading, not redirect examination, and not the proper method of proving the conversation and calling for a conclusion of the witness. The witness should be asked to give the words of such conversation and not his conclusions or deductions therefrom.

Mr. BLAKESLEE.—We asked the witness what was said. That, to us, means the words that were

(Deposition of Arthur G. Willard.)

uttered, if they can be remembered.

Mr. LYON.—The objection is repeated.

A. It is impossible to state the exact words.

Q. 535. (By Mr. BLAKESLEE.) Do you remember the general import of such words?

A. His whole talk has been that he is the inventor of it, and he did not seem to feel that he would have very much trouble to prove it and he said all he would expect me to do would be to give him a fair shake in the business, or something like that, and I told him at the time I knew very little about it, it had been a long time ago, I did not take any interest in it, and I only intended to give my testimony from the shop records, and that [349—291] the rest would be hearsay, and I was not going to testify to it.

Q. 536. When, aside from the shop records, and your recollection of some sketch which you have stated accompanied this order of 1908 of the Sunset-Monarch Oil Company, do you remember anything with respect to the dates and occurrences involved, other than as you have testified with respect to any order for an under-reamer or anything accompanying such order, involving Mr. Bole in any manner, prior to 1911?

Mr. LYON.—Objected to as leading.

A. No, sir.

Q. 537. You have testified that you thought possibly the 95/8 inch reamer for the Snnset-Monarch Oil Company, ordered in 1908, might be returned. Do you know anything as to any such return of that reamer? A. No, sir.

(Deposition of Arthur G. Willard.)

Q. 538. Prior to testifying to the various recapitulation account sheets, two bunches of which are in evidence, and one of which has been marked, "Monthly Report of Bole Pump Company Account for Identification," had you ever in detail examined these bundles of papers prior to giving your testimony about the same to-day?

A. Not these particular bunches, no, sir.

Q. 539. Can you cite any instance of any order for reamers which was received by the Wilson & Willard Manufacturing Company prior to the time Mr. E. C. Wilson came down from Bakersfield to take up active work at the shop of the Wilson & Willard Manufacturing Company, which order was sent out of that shop to Mr. Wilson at Bakersfield or any other place?

A. The shop records will show sales of under-reamers to the Sunset-Monarch Oil Company, Bakersfield Iron Works, Associated Oil Company, Oil Well Supply Company, Jacob & Davies in New York. [350—292]

Q. 540. I think you have misunderstood me. My question was to determine whether you recollect any instance of any order, that is, the requisitions or order, paper or letter, or blank, or other evidence, which had been sent to Mr. Wilson out of the shop, or away from the shop, or mailed from the shop to him prior to the time he finally connected himself with the management of the Wilson & Willard Manufacturing Company business in Los Angeles.

A. No, sir.

(Deposition of Arthur G. Willard.)

Q. 541. Did Mr. Knapp's duties as foreman of the shop of the Wilson & Willard Manufacturing Company have anything to do with the business of the Bole Pump Company in 1911 or 1912?

A. No, sir.

Q. 542. Was there a separate foreman for the Bole Pump Company business? A. Yes, sir.

Q. 543. Was Mr. Knapp responsible at all for any of the shop work of the Bole Pump Company in those years?

Mr. LYON.—Objected to as leading, irrelevant, immaterial, and not redirect examination.

A. No, sir.

Q. 544. Was Mr. Knapp, as far as you know, responsible for any work for Mr. Bole in the shop of the Wilson & Willard Manufacturing Company during those years?

Mr. LYON.—Same objection.

A. No, sir.

Q. 545. (By Mr. BLAKESLEE.) Did Mr. W. W. Wilson make any distinction in performing his services at any time, that is, his services on behalf of the Wilson & Willard Manufacturing Company between the interests of yourself, or any of the same, and the interest of Mr. E. C. Wilson or any of the same?

Mr. LYON.—Same objection as last noted on the record.

A. He was not supposed to. [351—293]

Q. 546. (By Mr. BLAKESLEE.) Do you know of any instance in which he so favored either party

(Deposition of Arthur G. Willard.)

or their interests?

Mr. LYON.—Same objection.

A. No, sir.

Q. 547. (By Mr. BLAKESLEE.) Please describe any changes that were made in the design or form of the single-piece key for Wilson under-reamers, or has been made since such single-piece key was first made in the shop of the Wilson & Willard Manufacturing Company.

Mr. LYON.—Objected to as not redirect examination.

A. I don't know of any changes.

Q. 548. (By Mr. BLAKESLEE.) Since arriving at this office to testify this morning, at any time during any recess or otherwise have you had any talk with me, with regard to your testimony given here or to be given in this case?

Mr. LYON.—Objected to as not redirect examination and as an apparent attempt solely to lay the foundation for the impeachment of the witness by the party calling him.

Mr. BLAKESLEE.—We urge the opposite complexion of such question.

A. No, sir.

Q. 549. Have you to-day had any discussion or talk with either Mr. E. C. Wilson, or W. W. Wilson, or Mr. Charles E. Wilcox, or William G. Knapp, testified about by you in this case, with regard to any of the issues of this interference?

Mr. LYON.—Same objection.

A. No, sir.

(Deposition of Arthur G. Willard.)

Q. 550. (By Mr. BLAKESLEE.) Were the two pieces of the two-piece key device of the Wilson under-reamer capable of alone holding themselves in place on the under-reamer?

Mr. LYON.—Objected to as leading and suggestive.

A. No, sir.

Q. 551. (By Mr. BLAKESLEE.) What was necessary to secure that [352—294] firm holding or position of these pieces? A. Screw plug.

Q. 552. When this plug was used, what effect, if any, did the spring have upon holding the pieces of the key and the plug in place?

A. The spring had no effect of holding either the plug or key in place.

Q. 553. Do you remember that settlement of the Bole Pump Company account of February, 1913, do you remember anything being said as between yourself and Mr. E. C. Wilson with respect to his participating in anything that you received from Mr. R. E. Bole on the notes given you by Mr. Bole, to offset the participation of Mr. E. C. Wilson in the loss occasioned by the compromise settlement of the account of the Bole Pump Company?

Mr. LYON.—Objected to as not redirect examination, irrelevant and immaterial to the issues of this interference and as leading.

A. As I remember it, I went up town and got Mr. Bole and brought him down to the shop in my automobile and on the way down I told him that if he would agree to pay the account in full I would go to

(Deposition of Arthur G. Willard.)

work and cancel the outstanding notes. Afterwards I told Mr. Wilson the proposition I had from Mr. Bole and he thought in view of the fact that he had agreed to cancel—agreed to settle this thing, that I should help him bear that loss, and divide the notes with him, and it was discussed along that line, but in our final settlement there was no mention made of the notes, the notes remained my property.

Mr. LYON.—Move to strike the answer from the record and exclude it from consideration on the ground stated in the objection to the question and upon the further ground that it does not appear that any such conversation was had in the presence of the party Bole, and it is therefore incompetent.

Q. 554. (By Mr. BLAKESLEE.) Then, as you remember, nothing more [353—295] was done about that?

Mr. LYON.—Same objection.

A. Nothing more was done about it at all, it was just forgotten.

Q. 555. (By Mr. BLAKESLEE.) I show you what purports to be two opposed pages, and a short inset in what purports to be a two-payment time book for the month of September, 1908, of the Wilson & Willard Manufacturing Company, and call your attention to an entry therein under column 21 opposite the name R. E. Bole, and ask if you know anything about such entry or what it pertains to.

Mr. LYON.—Objected to as not redirect examination, as leading and incompetent and no foundation laid, and the witness is not qualified to answer the

(Deposition of Arthur G. Willard.)

question. The alleged record has not been proven to be a true or correct record, nor is it shown that the witness has any personal knowledge of the keeping of such alleged record.

Mr. BLAKESLEE.—Possibly the answer of the witness may help out in these matters.

A. It shows the number of hours worked on the 21st, 22nd, 23rd, 24th, 25th, 26th, 28th, 29th, and 30th of September, 1908, the total number of hours of work per day and the total amount, and the part paid on the account and the balance due.

Q. 556. Work by whom? A. R. E. Bole.

Q. 557. What R. E. Bole?

A. Of the Bole Pump Company.

Q. 558. A party to this interference?

A. Yes, sir.

Q. 559. Have you ever seen that book before?

A. Yes, sir.

Q. 560. What do you know about the book generally?

A. It is the time book for the Wilson & Willard Manufacturing [354—296] Company, used during October, 1907, to May, 1910.

Q. 561. Did you ever see this book before?

A. Yes, sir.

Q. 562. When, and for the first time, when?

A. During October, 1907.

Q. 563. When after that?

A. The present moment.

Q. 564. Any time between that time?

A. Yes, sir; it is a part of the shop records and I

(Deposition of Arthur G. Willard.)

have seen it a number of times at the office of the Wilson & Willard Manufacturing Company.

Q. 565. What does that item in the column headed "21" mean, opposite to the name R. E. Bole?

Mr. LYON.—All of which is objected to on the ground it is not redirect examination and on the further ground that the record itself is the best evidence and the testimony of this witness is not proper or competent unless the book itself be offered in evidence in connection with the testimony.

Mr. BLAKESLEE.—Again we observe that we do not deem that it is necessary or that the Patent Office will require that we impound in the Patent Office all of the records of the Wilson & Willard Manufacturing Company if the same are properly identified and properly quoted from.

Mr. LYON.—Our objection is repeated and the proceeding of counsel for Wilson is objected to upon the further ground that every possible effort has been and is being used in this interference on behalf of the party Wilson to secrete and keep out of sight all of the records of the Wilson & Willard Manufacturing Company and to deny the party Bole any opportunity of inspecting the same or securing any portions thereof necessary for evidence [355—297] on his behalf and it is for that reason that we are insisting upon the production of the best evidence and if any attempt is made to prove by the records of the Wilson & Willard Manufacturing Company the dates, any of the dates, we insist that the records themselves be offered in evidence, otherwise we object on the ground

(Deposition of Arthur G. Willard.)

that the best evidence has not been produced and the further objection is made in this particular case that there is no proof of this particular record referred to being a true record or that it properly represents what it purports to be or what is set forth therein, or that it has not been changed or altered.

Mr. BLAKESLEE.—We deny that we have obstructed any proper portions of the records of this company and contend that we have gone to supererogation in showing everything which could be properly required to identify the various questions of time and act and the furnishing of circumstances pertinent to the determination of this issue. We are making out Wilson's case and we have no objection to the party Bole fetching in anything with which he wishes to incumber the record when it comes to taking his proof and which he can properly produce.

A. It means the number of hours of work for R. E. Bole on the 28th of September, 1908, for the Wilson & Willard Manufacturing Company.

Q. 566. Do you know whether it was before or after this date, namely, September 21st, 1908, that Mr. Bole turned in the order for the Sunset-Monarch Oil Company covering the $9\frac{5}{8}$ inch reamer, the 12 Bole pump, the 10-inch cutters, and the Bole casing spear, and I ask you to state if you know this, and if you don't, to make such statement as you may wish to fully cover the matter.

A. I don't know. I believe, however, it was prior to September 21st, 1908.

Q. 567. Have you any reason to remember why

(Deposition of Arthur G. Willard.)

you think it was before? [356—298]

A. Judging from the records of the time book.

Q. 568. What would they show to help you fix that?

A. Mr. Bole—it shows that Mr. Bole had no time in the shop on the 13th, 14th, 15th, 16th, 17th, 18th, 19th, and 20th of September, 1908, and that leads me to believe that during this time he was up in Maricopa.

Q. 569. Even admitting that, how do you arrive at the conclusion or belief that the order was received prior to this September 21st, 1908?

A. The shop order should show the date, the date of the receipt of the order, and I could only tell by referring to the shop order whether or not the order was received.

Q. 570. Are you able to state positively, that Mr. Bole was not at the shop of the Wilson & Willard Manufacturing Company after returning from Maricopa in September, 1908, and prior to going to work in the shop on the 21st of September, 1908?

A. No, sir.

Q. 571. Are you able to state that he was at the shop after such return and prior to such date of return to work, how long he was at the shop or how many days? A. No, sir.

Q. 572. Are you able to state positively that he was not at the shop or in the city of Los Angeles a week prior to going to work on the 21st of September, 1908?

Mr. LYON.—Objected to as leading.

(Deposition of Arthur G. Willard.)

A. No, sir.

Q. 573. If you wish to refresh your memory any further in these matters you may, of course, refer to the shop orders or rather the shop order in question from the Sunset-Monarch Oil Company.

(Witness examines book.) [357—299]

Mr. BLAKESLEE.—The witness has inspected binder folios No. 437 and 438, the same being dated respectively September 18, 1908, and September 19, 1908. "Charge to the Sunset Monarch Oil Company, Hazleton, California, salesman Bole, order received from Heber, Order No. 708, dated September 18th, 1908," referring to one 9⁵/₈ inch reamer and one extra set of cutters. The other is dated, "September 19th, 1908, Order No. 713," referring to one 10-inch Bole spear, the order received from Heber, salesman Bole, being part of the records of the Wilson & Willard Manufacturing Company.

Q. 574. Did you find anything on those shop orders or binder folios which indicates to you how these orders were received?

A. They were received from salesman Bole through the mail.

Q. 575. What indicates they were received through the mail?

A. Because Mr. Bole was in Maricopa at the time the orders were received.

Q. 576. Does anything on the orders or binder folios themselves indicate how they were received?

A. No, sir.

Q. 577. Are you willing to state positively that

(Deposition of Arthur G. Willard.)

Mr. Bole had not returned from Maricopa, September 18th, September 19th, 1908, or before then, in view of the fact that you have testified that he worked in the shop on September 21st, 1908?

Mr. LYON.—Objected to as leading and assuming that the witness has not testified positively, when he has just answered the preceding question to the effect that Mr. Bole was at Maricopa on September 18th, 1908.

Mr. BLAKESLEE.—We refer also to the witness' previous testimony, and ask him to consider all of it.

A. No, sir. [358—300]

Recross-examination.

(By Mr. LYON.)

Q. 578. According to your best recollection when was it that Mr. Bole returned from Maricopa in September, 1908?

A. According to my best recollection, Mr. Bole returned some time after the receipt of the orders.

Q. 579. Do you know in whose handwriting these two orders, No. 708 and 713, are? A. Yes, sir.

Q. 580. Whose? A. W. W. Wilson.

Q. 581. Do you know anything about why or what was the cause for the apparent scratching of the dates on these two binder folios No. 437 and 438 referring to shop orders 708 and 713, respectively, that date of the invoice? A. No, sir.

Mr. BLAKESLEE.—We object to the implication there has been scratching as to these dates; there appear to be abrasions on the sheet, but the final

(Deposition of Arthur G. Willard.)

showing as to dates is clear; it is a rubber stamp in each instance, being September 30th.

A. That has been changed, and that has been changed, and that has been changed.

Mr. LYON.—Witness refers to several of the sheets in this book appearing next after in point of time and number the binder folios Nos. 437 and 438 and points to the date of the invoice as appears thereon.

Q. 582. It is apparent to you, is it, Mr. Willard, that the paper of the binder folios No. 437 and No. 438 having thereon Order Nos. 708 and 713 under the words "Date of invoice" have been scratched with a knife or some sharp instrument?

Mr. BLAKESLEE.—Objected to as calling for a conclusion of the witness. [359—301]

Q. 583. (By Mr. LYON.) Please examine it carefully.

Mr. BLAKESLEE.—Let the witness state anything that he knows, if he knows, as to those matters.

A. Yes, sir.

Q. 584. (By Mr. LYON.) Do you know by whom this was done? A. No, sir.

Q. 585. Nor when it was done? A. No, sir.

Mr. BLAKESLEE.—Let the record show that counsel for Bole is generally exploring the two-payment time book discussed by the witness, which book has not been offered completely in evidence. We, however, have no objection to his inspection of any entry in this book as it concerns merely the employees of the concern and the time they worked and

(Deposition of Arthur G. Willard.)

the amount paid them.

Q. 586. (By Mr. Lyon.) During September, 1908, the afternoon time of the workmen in the shop of the Wilson & Willard Manufacturing Company was from 12:30 to 4:30? A. Yes, sir.

Q. 587. That would be four hours' time?

A. Yes, sir.

Q. 588. I notice that this time book to which you have referred shows that Mr. Bole worked four hours only on September 21st, 1908. Is that a circumstance which would enable you in any manner to fix the time of his return from his Maricopa trip and going to work again for the Wilson & Willard Manufacturing Company?

A. Not positively, no, sir.

Q. 589. What does it signify to you?

A. It signifies to me that R. E. Bole went to work at 12:30 and worked until 4:30 on September 21st.

Q. 590. That was his first work he did at the shop after leaving for Maricopa, California? [360—302]

A. Yes, sir.

Q. 591. Are you very positive, Mr. Willard, that Mr. W. W. Wilson was present in the shop of the Wilson & Willard Manufacturing Company and employed there at any time during September, 1908, or was it a fact that the work was getting heavy, and you were getting behind in your bookkeeping, and he came into the employ of the Wilson & Willard Manufacturing Company on or a little after October 1st, 1908? A. No, sir, I am not positive.

(Deposition of Arthur G. Willard.)

Q. 592. Is there any record of the Wilson & Willard Manufacturing Company that you know of which would positively fix this fact?

A. Not unless it would be some record in the old ledger regarding Mr. Wilson's time and salary and services on certain dates.

Mr. BLAKESLEE.—The witness may take the ledger but we refuse *to counsel* or anybody else an inspection of this ledger.

Q. 593. (By Mr. LYON.) Please examine this ledger and see if you can find anything in it, Mr. Willard, which will fix the date upon which Mr. W. W. Wilson entered the employ of the Wilson & Willard Manufacturing Company in 1908. If so, state what it is and read such entry in the record.

A. I am not able to determine from the ledger just what time Mr. Wilson entered upon his duties. His first salary was paid to him, however, on October 16th, 1908.

Q. 594. What was the amount of such payment?

A. \$37.50.

Q. 595. How much was he getting monthly when he first went to work? A. \$75 per month.

Q. 596. When you sold your interest in the Bole Pump Company to R. E. Bole it was understood that the business should be carried on by the Wilson & Willard Manufacturing Company in the [361—303] manner it had been theretofore?

A. Yes, sir, excepting that I no longer guaranteed the account. Mr. Wilson understood that.

Q. 597. The guarantee of this Bole account by

(Deposition of Arthur G. Willard.)

you was simply a personal verbal one to Mr. E. C. Wilson, was it?

A. Partly. For a long time the Bole pump was charged to A. G. Willard personally, and during that time there was other matters charged to us, such as the Willard circulating head and other things, so Mr. Wilson elected to change the account and make it Willard's personal account and the Bole Pump account and it was understood that I guaranteed the account.

Redirect Examination.

(By Mr. BLAKESLEE.)

Q. 598. Do you know whether or not Mr. W. W. Wilson performed work or services at the shop or office of the Wilson & Willard Manufacturing Company prior to the period in 1908 which his actual pay covered?

Mr. LYON.—Objected to as leading and suggestive.

A. No, not positively; no, sir.

Q. 599. (By Mr. BLAKESLEE.) What is your recollection as to that?

A. I have none excepting the shop records.

Q. 600. You are sure, are you, that these orders of September 18th and 19th of the Sunset-Monarch Oil Company are in W. W. Wilson's handwriting?

A. Yes, sir.

Q. 601. You are not prepared to state positively that Mr. W. W. Wilson was not rendering services for the Wilson & Willard Manufacturing Company

(Deposition of Arthur G. Willard.)

on September 18th or 19th, 1908, or even prior thereto?

Mr. LYON.—Objected to as leading.

A. No, sir. [362—304]

A. G. WILLARD, recalled for further direct examination, testified as follows:

Direct Examination.

(By Mr. BLAKESLEE.)

Q. 602. With relation to the time when Mr. Wilson filed his application for patent involved in this interference, how do you fix the time you told Mr. E. C. Wilson that Mr. R. E. Bole had applied or intended to apply for an application for the patent involved in this interference?

A. I have no way of fixing the exact date.

Q. 603. Have you any definite recollection as to whether you told Mr. Wilson this before Mr. Bole applied or after Mr. Bole applied? A. After.

Q. 604. How do you fix such information to Mr. Wilson as being after the time Mr. Bole applied?

A. I remember distinctly that Mr. Bole told me that he had applied for the patent and I also remember that it was after this time that I informed Mr. Wilson that Mr. Bole had applied for a patent.

Q. 605. How soon after would you fix that time?

A. From thirty to ninety days.

Q. 606. I call your attention to the fact that the application of Mr. Wilson involved in this interference was filed twenty-seven days after Mr. Bole filed his application for the patent in suit, that is, filed it in Washington, D. C. Are you able to state it was

(Deposition of Arthur G. Willard.)

during these twenty-seven days that you told Mr. Wilson Mr. Bole had filed an application?

Mr. LYON.—Objected to as leading.

A. It was after that date, after the date of Mr. Wilson's application.

(Signed.) ARTHUR G. WILLARD. [363—305]

[Testimony of A. G. Willard, for Defendants (in Rebuttal).]

A. G. WILLARD, recalled on behalf of Wilson, testified in rebuttal as follows:

Direct Examination.

(By Mr. BLAKESLEE.)

Q. 1. Mr. Willard, have you read the testimony of Robert E. Bole, taken on his own behalf in this interference? A. Yes, sir.

Q. 2. Referring to binder folio 437 relating to the order of the Sunset-Monarch Oil Company, dated September 18, 1908, and which has a notation "Salesman Bole," can you state who was in charge of the shop of the Wilson & Willard Manufacturing Company and the premises at the time that order was received?

Mr. LYON.—Objected to as not rebuttal and having been fully gone over in the testimony of this witness and other witnesses on behalf of the party Wilson in his *prima facie* proofs.

A. Do you want a list of all the men working at that time?

Q. 3. (By Mr. BLAKESLEE.) No; just the party who was in charge of the shop.

(Testimony of A. G. Willard.)

Mr. LYON.—The same objection.

A. I was in charge.

Q. 4. (By Mr. BLAKESLEE.) I now show you the time slips of order No. 709 and ask you if you know anything about it. Let it be shown that the witness is shown Bole's Exhibit Wilson Cross-examination Exhibit 1. [364—306]

Mr. LYON.—Objected to as not rebuttal, and on each of the grounds stated in the objection made heretofore.

A. It is the time cards of the men who worked on reamer 173, part of them, at least.

Q. 5. (By Mr. BLAKESLEE.) Do you know what was done with that reamer?

Mr. LYON.—The same objection.

A. No, sir.

Q. 6. (By Mr. BLAKESLEE.) Do you know who ordered that reamer?

Mr. LYON.—The same objection.

A. No, sir.

Q. 7. (By Mr. BLAKESLEE.) I will call your attention to the fact that several of these slips bear the name "Bole." Do you know in whose handwriting that name appears?

Mr. LYON.—The same objection.

A. Mr. Bole's handwriting.

Q. 8. (By Mr. BLAKESLEE.) You mean Robert E. Bole, party to this interference?

Mr. LYON.—The same objection.

A. Yes, sir.

Q. 9. (By Mr. BLAKESLEE.) I call your at-

(Testimony of A. G. Willard.)

tention particularly to the answers and questions numbered from 63 to 71 inclusive on pages 56 and 57 of the record of Bole, in which Mr. Bole has testified a certain conversation took place between himself and yourself after he got back to the shops of the Wilson & Willard Manufacturing Company in September, 1908, and I will ask you to state whether you recollect any such conversation, and what you recollect in that respect.

Mr. LYON.—Objected to as leading and having been fully gone over in the previous deposition of this witness in the *prima facie* proofs of the party Wilson, and not rebuttal; and as not the proper method of proof. [365—307]

Mr. BLAKESLEE.—We insist upon our right to traverse any statements or testimony on behalf of the party Bole, that such statements were made irrespective of what our prior proofs may have been.

A. I don't remember of any such conversation.

Q. 10. (By Mr. BLAKESLEE.) Do you know whether the order of the Sunset-Monarch Oil Company, referred to in that testimony, was filled? That is, whether a reamer was shipped to the Sunset-Monach Oil Company?

Mr. LYON.—Objected to as not rebuttal and as leading.

A. The reamer was shipped; yes, sir.

Q. 11. (By Mr. BLAKESLEE.) Are you able to state at this time what kind of a reamer was so shipped?

Mr. LYON.—Objected to as not rebuttal.

(Testimony of A. G. Willard.)

A. Not positively, no.

Q. 12. (By Mr. BLAKESLEE.) Prior to the shipment of the reamer on that order, did you take up the matter of that order in any respect with Mr. E. C. Wilson?

Mr. LYON.—Objected to as not rebuttal and as leading.

A. No, sir.

Q. 13. (By Mr. BLAKESLEE.) Did you state to Mr. Bole at such time, namely, the time mentioned in the testimony referred to, that Mr. Wilson would stand for no change in the reamer whatsoever?

Mr. LYON.—Objected to as not rebuttal.

A. I don't think I ever made any such statement, because I had no way of knowing what Mr. Wilson would stand for.

Q. 14. (By Mr. BLAKESLEE.) At the time of that purported conversation, was anything said between Mr. Bole and yourself with reference to the making of a heavier tee bar for Wilson reamers?

Mr. LYON.—Objected to as not rebuttal, and calling for a conclusion of the witness. If the witness had a conversation, he [366—308] should be asked to give the conversation in full before being so interrogated.

A. No, sir; certainly not.

Q. 15. (By Mr. BLAKESLEE.) Did Mr. Bole at that time, namely, the time of such purported conversation with you, tell you that he could or you could overcome that difficulty of the tee bar breaking, or any such difficulty, and could bore out the

(Testimony of A. G. Willard.)

reamer body and flatten out the spring, and put in a flat spring in place of a round spring, and get the same strength of spring and make a heavier tee bar, and, if necessary, make a key very thin and deep, and that would add strength to the tee bar?

Mr. LYON.—Objected to as leading and not rebuttal, and not the proper method of proof.

A. No, sir.

Q. 16. (By Mr. BLAKESLEE.) Have you read the testimony of August F. Adams, called as a witness on behalf of the party Bole in this interference?

A. Yes, sir.

Q. 17. I call your attention particularly to that portion of Adams's testimony being cross-questions and the answers thereto, numbers 61 to 66, inclusive, and ask you what you have to say as to such testimony.

A. I do not remember being present at any such conference, and I am quite positive that I have never driven a single-piece key into a Wilson under-reamer, nor have I driven one out of a Wilson under-reamer, at that time, or before, or since.

Q. 18. Were you at any time ever present in the shop of the Wilson & Willard Manufacturing Company when the said Adams and Robert E. Bole were also present, and when Mr. Bole referred to any drawing in speaking to Mr. Adams?

Mr. LYON.—Objected to as leading.

A. No, sir. [367—309]

Q. 19. (By Mr. BLAKESLEE.) Were you ever present under similar circumstances at any time

(Testimony of A. G. Willard.)

when Mr. Bole referred to any sketch and the way it purported to have worked?

Mr. LYON.—Objected to as leading.

A. No, sir.

Q. 20. (By Mr. BLAKESLEE.) Did you at any time ever drive a key into a Wilson reamer in the presence of Mr. Adams, the witness referred to?

Mr. LYON.—Objected to as leading.

A. Not a single-piece key.

Q. 21. (By Mr. BLAKESLEE.) Do you recollect having ever driven any kind of a key into the Wilson reamer when the said Adams was present?

Mr. LYON.—Objected to as leading.

A. No, sir.

Q. 22. (By Mr. BLAKESLEE.) During the making up of the reamer which was shipped to the Sunset-Monarch Oil Company on their order of September, 1908, which Mr. Bole has testified he took, did you communicate with relation to that reamer in any respect with Mr. E. C. Wilson, party to this interference?

Mr. LYON.—Objected to as not rebuttal, having been fully gone over in the testimony of the witness in his deposition in the *prima facie* proofs of this party.

A. No, sir.

Q. 23. (By Mr. BLAKESLEE.) I show you what purports to be a sketch, together with certain names and other writings, attached to a white sheet of paper, concealing the identification thereof, and ask you if you have ever seen the same before.

(Testimony of A. G. Willard.)

A. Yes, sir; I have.

Q. 24. When? A. In this office.

Q. 25. And when? [368—310]

A. I think it was last Thursday.

Q. 26. Thursday of last week?

A. I think that was the date.

Q. 27. Did you ever see it before that time?

A. No, sir.

Mr. BLAKESLEE.—Let it be shown that the witness has last testified with respect to Bole's Exhibit January 27, 1911, Sketch.

Q. 28. In making under-reamers in the shop of the Wilson & Willard Manufacturing Company, and I mean Wilson reamers as you have testified to them, what was the first step taken in working up the under-reamer at the time or about the time or including the time that the order of September, 1908, was filled and shipped to the Sunset-Monarch Oil Company?

Mr. LYON.—Objected to as not rebuttal and as leading and assuming that there was a regular custom, and as irrelevant and immaterial.

A. Machining the body was usually the first operation.

Q. 29. (By Mr. BLAKESLEE.) What was this machining done on?

Mr. LYON.—The same objection.

A. On the lathe.

Q. 30. (By Mr. BLAKESLEE.) And what was the work as taken up by the lathe machinist when the job came to him?

(Testimony of A. G. Willard.)

Mr. LYON.—The same objection.

A. I don't understand that.

Q. 31. (By Mr. BLAKESLEE.) Question withdrawn. What was the condition of the work when it came to the lathe operator?

A. It was in the rough.

Q. 32. What was it called, in the rough?

A. A forging.

Q. 33. A forging of what?

A. Under-reamer body. [369—311]

Q. 34. What was the general shape or nature of this forging?

A. It was forged round and cut off to the length of the reamer, and a collar turned down for the pin.

Q. 35. A piece of round forge stock, was it, in the beginning? A. Yes, sir.

Q. 36. What was the first lathe operation?

A. Centering it up and turning the outside.

Q. 37. And what was next done when it was turned down externally of the right size?

Mr. LYON.—This line of examination is objected to, and each question and answer is objected to, on the ground that it is not rebuttal testimony and immaterial.

A. Bored out.

Q. 38. (By Mr. BLAKESLEE.) And what was it bored out of?

Mr. LYON.—The same objection.

A. To receive a spring.

Q. 39. (By Mr. BLAKESLEE.) How was the diameter of the bore established?

(Testimony of A. G. Willard.)

A. Taken from the blue-print.

Q. 40. And what was it bored to fit, or what was to fit in the bore? A. The spring.

Q. 41. And what was the spring mounted on?

A. The tee bar.

Q. 42. What was the nature of the fit of the tee bar and spring in the bore?

A. It fitted within a quarter of an inch.

Q. 43. What you might call a free-working fit?

A. Yes, sir.

Q. 44. If a meterial change or increase was made in the size of the coil of spring or of the body of the tee bar, would any [370—312] difference be made in the diameter of the bore in the body?

Mr. LYON.—Objected to as leading.

A. The bore would be made larger.

Q. 45. (By Mr. BLAKESLEE.) Now, as to the manufacture of the reamer shipped to the Sunset-Monarch Oil Company on the order of September, 1908, which we have discussed, do you remember anything with respect to the boring of the body of that reamer?

Mr. LYON.—Objected to as not rebuttal.

A. It was made the same as all reamers of that size.

Q. 46. (By Mr. BLAKESLEE.) Was there any difference made in the size of the internal diameter of that body?

Mr. LYON.—The same objection and as leading.

A. No, sir.

Q. 47. (By Mr. BLAKESLEE.) How soon

(Testimony of A. G. Willard.)

after that order was received, to the best of your recollection, was such body boring operation commenced on that reamer?

A. Inside of two days, I would say.

Q. 48. Where was this boring operation performed of reamer bodies at that time?

A. On a Bridgford lathe.

Q. 49. What lathe was the turning of the body done on?

Mr. LYON.—The same objection.

A. The same lathe.

Q. 50. (By Mr. BLAKESLEE.) How did these operations occur as to time?

Mr. LYON.—The same objection, and not rebuttal.

A. The body was first turned, and it was immediately bored before it left the lathe. One operation following the other.

Q. 51. (By Mr. BLAKESLEE.) How many machinists were employed on these two pieces of work on the same lathe?

Mr. LYON.—Objected to as not in rebuttal. [371—313] A. One.

Q. 52. (By Mr. BLAKESLEE.) The same workman for both operations?

A. Yes, sir; unless we are running a night shift, and then there would be two workmen on the same lathe.

Q. 53. Were you running a night shift in September, 1908? A. I can't state.

Q. 54. Do you recollect that you were?

Mr. LYON.—Objected to as leading and incom-

(Testimony of A. G. Willard.)

petent, the witness having already said that he has no recollection.

A. No, I do not.

Q. 55. (By Mr. BLAKESLEE.) Are you able to give any recollection at this time as to the means which were installed in the reamer shipped to the Sunset-Monarch Oil Company on the order of September, 1908, which means were employed to hold the lower end of the spring?

Mr. LYON.—Objected to as not rebuttal, having been thoroughly gone over in the previous deposition of this witness, and when called as a witness in the *prima facie* proofs by the party Wilson, and as already answered by this witness. He said he didn't remember.

A. I can't say positively, no.

Q. 56. (By Mr. BLAKESLEE.) Have you any recollection as to that? A. No, sir.

Q. 57. Do you recollect whether any departure was made in the production of this reamer from the general practice or general run of reamers put through the shop at that time?

Mr. LYON.—Objected to as leading and as incompetent, calling for a mere conclusion or guess of the witness, the witness having already testified that he has no knowledge in regard thereto; and on the further ground that it is not rebuttal, the same subject [372—314] matter having been fully gone over on the testimony of this witness when called as a witness on behalf of the party Wilson during Wilson's *prima facie* proofs.

(Testimony of A. G. Willard.)

A. The reamer was a stock or standard reamer, in every particular.

Mr. LYON.—We move to strike the answer from the record and exclude it from consideration on the grounds stated in the objection.

Q. 58. (By Mr. BLAKESLEE.) Prior to September, 1908, had Robert E. Bole ever disclosed to you by word of mouth, or sketch, or in any manner, improvements in other devices or inventions in other devices which he was considering or had under way? And I am asking you now to tell me if that was the case, and what these things were. Merely if he had done so.

Mr. LYON.—Objected to as leading and as immaterial

A. Yes, sir.

Q. 59. (By Mr. BLAKESLEE.) And has the same been true at times subsequent to that month of that year?

Mr. LYON.—The same objection, calling for a conclusion of the witness and not rebuttal.

A. Yes, sir.

Q. 60. (By Mr. BLAKESLEE.) Can it be truthfully said as to the relations between yourself and Mr. Bole during the year 1908, that they were confidential and close?

Mr. LYON.—Objected to as calling for a conclusion of the witness and not rebuttal.

A. We were on the best of terms.

Q. 61. (By Mr. BLAKESLEE.) How fre-

(Testimony of A. G. Willard.)

quently did you have general talks with Mr. Bole that year?

Mr. LYON.—The same objection.

A. I saw Mr. Bole every day when he was in the city. [373—315]

Q. 62. (By Mr. BLAKESLEE.) And out of the shop at times, as well?

A. No; I can't say that I saw him out of the shop so much.

Q. 63. How was it during the years 1909 and 1910? Did you meet Mr. Bole socially out of the shop during those years?

Mr. LYON.—Objected to as not rebuttal, having been fully gone over in the previous deposition of this witness, and as leading.

A. I can't state positively. Mr. Bole had been a welcome visitor at our house for a number of years, and spent frequent evenings out there.

Q. 64. (By Mr. BLAKESLEE.) And how many times were you at ball games?

Mr. LYON.—The same objection.

A. We were out on trips and at ball games.

Q. 65. (By Mr. BLAKESLEE.) And during these trips and these occasions, did or did not Mr. Bole discuss with you contemplated business plans or changes in devices he had under way?

Mr. LYON.—Objected to as not rebuttal, as leading and incompetent, calling for a conclusion of the witness, not the best evidence and not the proper method of proof. And if it is desired to prove conversations, the conversations should be proven by the

(Testimony of A. G. Willard.)

words thereof as far as the witness can remember them, and not by his deductions or conclusions therefrom.

A. He did to a certain extent.

Mr. BLAKESLEE.—That is all.

Mr. LYON.—Without waiving any of the objections to questions and answers, and subject to a motion now made to strike from the record and exclude from consideration each of the questions asked and answers given, on the ground that the same are not rebuttal, and on each of the other grounds stated in the objections to the questions, and to abide a ruling upon such motions and to follow [374—316] the same, I cross-examine the witness.

Cross-examination.

(By Mr. LYON.)

XQ. 66. I believe you stated, Mr. Willard, that you were at this office, to wit, Mr. Blakeslee's office, on Thursday, September 25, 1914. At what time did you call at this office, and how did you come to call there?

Mr. BLAKESLEE.—Objected to as not in accordance with the testimony of the witness. September 25 would hardly be last Thursday.

A. I didn't get in here. I was not here at that time.

XQ. 67. (By Mr. LYON.) Should it be October 2?

Mr. BLAKESLEE.—October 1 would be Thursday.

(Testimony of A. G. Willard.)

Mr. LYON.—I object to counsel for Wilson coaching the witness.

Mr. BLAKESLEE.—I am simply calling counsel's attention to the previous testimony and the fact that he is apparently attempting to mislead the witness by an improper reference to his testimony.

A. Thursday, October 1.

XQ. 68. (By Mr. LYON.) How did you come to visit Mr. Blakeslee's office that day?

A. By request.

XQ. 69. Of whom?

A. W. W. Wilson, I believe.

XQ. 70. At what time did you come to this office on said day? A. Between 1 and 2 o'clock.

XQ. 71. And how long did you remain?

A. Till 3 o'clock.

XQ. 72. During that time you were discussing the testimony that had been given and the testimony that you were to give in this case, were you?

A. No, sir. [375—317]

XQ. 73. You had no discussion whatever of it?

A. We had no discussion pertaining to the testimony that I was to give.

XQ. 74. What was that discussion about?

A. Regarding this here drawing that has been placed in evidence, principally; and talking about the trip, and I was asked by Mr. Blakeslee if I would care to read over the testimony of Mr. Bole, Adams and Heber, and I took the testimony home with me and read it at home.

XQ. 75. Are we to understand that you have a

(Testimony of A. G. Willard.)

distinct recollection of the manufacture of this under-reamer for the Sunset-Monarch Oil Company in September, 1908?

A. I have a distinct recollection that it was made standard and that no changes were made.

XQ. 76. Now, please answer the question.
(Question is read.) A. No, sir.

XQ. 77. Where was the order for such under-reamer received?

A. The shop of the Wilson & Willard Manufacturing Company, 1520 Santa Fe Avenue.

XQ. 78. In what manner was such order received? A. It came through the mail.

XQ. 79. From whom?

A. Mr. Robert E. Bole.

XQ. 80. What has become of that order?

A. Do you refer to the original order or letter?

XQ. 81. The original order or letter.

A. I can't answer the question.

XQ. 82. Will you swear positively that you did not send that original order or letter of Robert E. Bole, to whom we have referred, to Mr. E. C. Wilson at Bakersfield, California?

A. Yes, sir. [376—318]

XQ. 83. Your recollection to-day is very different from when you were on the stand before, is it?

A. Somewhat.

XQ. 84. Please tell us why.

Mr. BLAKESLEE.—Objected to as not cross-examination, not the proper method of proof and not calling for a statement of facts, but calling for a

(Testimony of A. G. Willard.)

psychological conclusion, and no foundation laid.

A. I have had two months to think this thing over.

XQ. 85. (By Mr. LYON.) Are you prepared to state that work upon the reamer which was shipped to the Sunset-Monarch Oil Company in September, 1908, and I mean upon the particular reamer that was subsequently shipped to that company, was commenced prior to receiving the order from Mr. Bole? A. No, sir.

XQ. 86. After still thinking the matter over for two months, are you still of the opinion that you do not remember what sketch or sketches the order sent in by Mr. Robert E. Bole in September, 1908, for this Sunset-Monarch reamer were?

Mr. BLAKESLEE.—Objected to as calling merely for an expression or opinion and not for a statement of fact and not for the proper method of proof.

A. I don't remember that there was a sketch accompanied the order.

XQ. 87. (By Mr. LYON.) What kind of reamers were you manufacturing at the Wilson & Willard shop in the latter part of September, 1908? And I refer particularly to the devices for holding the tee bar in place and the tee bar.

A. Wilson under-reamer.

XQ. 88. That is not an answer to the question, as you know. Please read the question again and let him answer.

Mr. BLAKESLEE.—We object to the witness being criticised. [377—319]

(Testimony of A. G. Willard.)

A. We were manufacturing the Wilson under-reamer in 1908.

XQ. 89. (By Mr. LYON.) With what kind of a tee bar at that time?

A. To the best of my recollection the slotted tee bar and 2-piece key.

XQ. 90. Were you manufacturing in the month of September, 1908, at the Wilson & Willard Manufacturing Company's shop in Los Angeles, any of the Wilson under-reamers of the block and screw type?

A. Not to the best of my recollection.

XQ. 91. Will you swear positively that you were not? A. No.

XQ. 92. Will you state positively that you did not tell Mr. Robert E. Bole that you had sent this original order containing this sketch of the 1-piece key, or the key device which Bole sent in as a part of this Sunset-Monarch Oil Company order of 1908, to Elihu C. Wilson at Bakersfield, California?

A. I am positive that I never told Mr. Bole that I sent his letter to Mr. E. C. Wilson at Bakersfield.

XQ. 93. You never had any conversation at all with Mr. Bole in regard to that Sunset-Monarch order or that key device or the contemplated change in the Wilson reamer to fill such Sunset-Monarch Oil Company order, did you?

A. I had some conversation with Mr. Bole regarding the shipment of the reamer; yes, sir.

XQ. 94. When did you have that conversation?

A. When Mr. Bole returned from Coalinga.

(Testimony of A. G. Willard.)

XQ. 95. What was that conversation? Please state it in full.

A. That there would be no change in the reamer; that it would be shipped the same as the other reamers that we were making.

XQ. 96. Is that all the conversation?

A. That is the substance of it.

XQ. 97. Give us the rest of it. [378—320]

A. That is all I can give you.

XQ. 98. Did you give Mr. Bole at that time any reason why the changes would not be made?

A. I told Mr. Bole that I had no authority to make the changes in the reamer.

XQ. 99. Did you explain to him why you had no authority to make changes in the reamer?

A. I don't know as it was necessary.

XQ. 100. Answer the question. A. No, sir.

XQ. 101. You have been shown Bole's Exhibit January 27, 1911, Sketch. I will ask you to examine the same and state if you are familiar with the signatures there.

A. Yes, sir; I am familiar with the three signatures—

Mr. BLAKESLEE.—Objected to as indefinite and as assuming that anything appearing on such sketch is a signature, original, reproduction, or otherwise.

XQ. 102. (By Mr. LYON.) What three signatures?

A. The signature of Mr. W. H. Fahnestock, E. F. Grigsby and Robert E. Bole.

XQ. 103. You have seen the signatures of these

(Testimony of A. G. Willard.)

three men a great many times, have you?

A. Yes, sir.

XQ. 104. Are you able to state that these are the signatures of those three men?

A. To the best of my belief they are the signatures of the three men.

XQ. 105. I believe you stated that Mr. Bole never showed you this particular sketch. Is that correct?

A. He never showed me the sketch. He may have showed me the signatures.

XQ. 106. When? [379—321]

A. At one time at a ball game he showed me a signature, and the rest of it hid. I don't know whether it was the same one or not. He showed me the signature of W. H. Fahnestock and the rest of it hid.

XQ. 107. And you had some conversation with him in regard to it at that time?

A. He asked me if I recognized it, or something to that effect.

XQ. 108. He didn't show you the sketch at the time, did he? A. No, sir.

XQ. 109. What conversation did you have with Mr. Bole at that time regarding such signature? Please state it in full.

A. If I remember, he told me he showed the signature to W. H. Fahnestock and asked him if he recognized it, or words to that effect, and I believe he said Mr. Fahnestock admitted that it was his signature.

Mr. BLAKESLEE.—We ask that the answer be stricken out as merely hearsay with respect to any-

(Testimony of A. G. Willard.)

thing that the party Fahnestock referred to may have said, or may have been purported to have said.

XQ. 110. (By Mr. LYON.) You have given your best recollection of this conversation at the ball game that you refer to? A. Yes, sir.

XQ. 111. Isn't it a fact that Mr. Bole told you that Mr. W. H. Fahnestock asked him if he had any sketch or sketches with his signature thereon, and that Bole had told you he then showed him this signature on this sketch, and that Bole then told you that Fahnestock said, "That is my signature, all right. I would like to know the date of the sketch"?

Mr. BLAKESLEE.—Objected to as not the proper method of proof, calling for testimony which can be nothing more than hearsay as to what the party Fahnestock is supposed to have said. [380—322]

A. I believe that is straight, all right. I think some such conversation took place.

Mr. LYON.—That is all.

Redirect Examination.

(By Mr. BLAKESLEE.)

RDQ. 112. The party Bole has testified in answer to question 40, page 52: "As I went along in the letter I described the new style reamer and with each description I drew a sketch. I drew a sketch of this key and I drew a sketch of the tee bar and showed him how he could make it heavier than the old style, or the one that had broken all the time and given them all the trouble."

What have you to say as to any such sketches distributed throughout any such letter sent in by Mr.

(Testimony of A. G. Willard.)

Bole in connection with this order from the Sunset-Monarch Oil Company of September, 1908?

Mr. LYON.—Objected to as leading and suggestive, and as calling for a conclusion of the witness and not for a statement of facts, and not for the best evidence.

A. I never saw the sketches.

RDQ. 113. (By Mr. BLAKESLEE.) Do you remember to whom this letter ordering this reamer for the Sunset-Monarch Oil Company was addressed?

A. No, sir.

RDQ. 114. And you saw the letter, did you?

A. Yes, sir.

RDQ. 115. I call your attention again to binder folios 437 and 438 of the records of the Wilson & Willard Manufacturing Company, which pertain to those two orders of the Sunset-Monarch Oil Company, one for a reamer and the other for a Bole spear, and to the red line indorsements at the bottom of the respective binder folios, namely, "Cr. E. C. W." and "Cr. R. E. Bole," and I will ask you to state what you know as to such indorsements or notations. [381—323]

Mr. LYON.—Objected to as not redirect examination and not rebuttal.

A. The letters "Cr" and "E. C. W." refer to the account of Mr. E. C. Wilson. In other words, it means to credit Mr. E. C. Wilson's account.

RDQ. 116. (By Mr. BLAKESLEE.) Now, on page 285.

A. On page 285 the letters "Cr. R. E. Bole" is to

(Testimony of A. G. Willard.)

credit the account of R. E. Bole.

RDQ. 117. Do you know why these different notations were made on these two binder folios?

Mr. LYON.—The same objection.

A. Yes, sir.

RDQ. 118. (By Mr. BLAKESLEE.) Please state.

A. It is the custom down at the shop there in entering the shop order to charge the account for the cost of manufacture, and credit the account with the sale.

RDQ. 119. And do the notations "Salesman Bole" on both of these binder folios relate to the same Mr. Bole?

Mr. LYON.—The same objection, and as leading.

A. Yes, sir.

RDQ. 120. (By Mr. BLAKESLEE.) And in that case why were the different notations made as to credits upon these binder folios?

Mr. LYON.—The same objection.

A. The spear was made and charged to R. E. Bole, and the reamer was made and charged to E. C. Wilson.

RDQ. 121. (By Mr. BLAKESLEE.) Why was the spear charged to Mr. R. E. Bole?

Mr. LYON.—The same objection.

A. It was a Bole spear, made under Mr. Bole's direction.

RDQ. 122. (By Mr. BLAKESLEE.) Was there something special on this Bole spear order?

(Testimony of A. G. Willard.)

Mr. LYON.—The same objection, and calling for a conclusion of the witness.

A. Yes, sir.

RDQ. 123. (By Mr. BLAKESLEE.) What was there special about it?

Mr. LYON.—The same objection.

A. Nothing special, only in the construction; that is all.

RDQ. 124. (By Mr. BLAKESLEE.) Was there anything special about the order for the under-reamer?

Mr. LYON.—Objected to as leading.

A. No, sir.

RDQ. 125. (By Mr. BLAKESLEE.) Then why was the order credited to E. C. Wilson? That is, the order for the reamer.

A. Because he had been charged with the manufacture of the reamer, and it was our custom to give the account credit.

RDQ. 126. When was such credit given?

A. Once a month.

RDQ. 127. Now, have you any recollection of anything which distinguished this order of the Sunset-Monarch Oil Company of September, 1908, for a reamer from the reamers as they were being turned out in the shop of the Wilson & Willard Manufacturing Company, bearing in mind that you have stated that you told Bole there would be no changes in filling such order?

Mr. LYON.—Objected to as leading and as not rebuttal, having been fully gone over in the deposi-

(Testimony of A. G. Willard.)

tion of this witness when called as a witness on behalf of Wilson during the time of his *prima facie* case.

A. No, sir.

RDQ. 128. (By Mr. BLAKESLEE.) If the filling of this order for a reamer for the Sunset-Monarch Oil Company on the order of September, 1908, had in fact involved any special features of construction traceable to Mr. Bole, what would have been the [383—325] indorsement in the binder folio of such order, in accordance with the custom in the shop at that time?

Mr. LYON.—Objected to as not rebuttal and as argumentative, and as leading and assuming that there was a custom, and as incompetent and calling for a conclusion of the witness, no foundation laid, not the best evidence.

Mr. BLAKESLEE.—The witness has testified in foundation for such question as to the custom in indorsing binder folios.

A. There would have been a record made on the sheet of the binder folio stating just what the alterations or changes were that were made.

RDQ. 129. What sort of a looking thing was it that was shown to you at the ball game some time ago, with what purported to be a Fahnestock signature on it?

A. It appeared to me to be a card about the same size as in evidence here with a card above and below the signature.

RDQ. 130. What kind of a card or what colored card? A. White, I would say.

(Testimony of A. G. Willard.)

RDQ. 131. What sort of material was the signature on?

A. I don't know. I can't say positively.

RDQ. 132. Was it on the kind of material that I show you in connection with Bole's Exhibit January 27, 1911, Sketch?

Mr. LYON.—Objected to as leading.

A. Have you got a couple of cards? (Takes two cards and conceals the upper and lower part of the exhibit referred to.) That is all I saw. I don't know.

Mr. BLAKESLEE.—The witness illustrates on the sketch by covering the face of the sketch so as to obscure everything but the purported signature of W. H. Fahnestock.

RDQ. 133. Do you remember anything as to the nature of material that the signature appeared to be on?

A. A light background; that is all I remember.
[384—326]

RDQ. 134. Was it the same color as this sketch or tracing?

Mr. LYON.—Objected to as leading.

A. It appeared to be the same.

RDQ. 135. (By Mr. BLAKESLEE.) Why did Mr. Bole cover up everything but the signature?

A. He didn't state his reasons, and I didn't ask them.

RDQ. 136. Did he show you anything else at that time in connection with this obscured or partially obscured surface? A. I think not.

(Testimony of A. G. Willard.)

RDQ. 137. When was this occurrence?

A. Back there in June or July, when we were at the ball game.

RDQ. 138. What year? A. 1914.

RDQ. 139. Do you remember when it was with relation to the time that Mr. Wilson gave his testimony in the opening case in this interference?

A. No, sir.

RDQ. 140. When was it with respect to the time you were interrogated about when you were at the ball game and Mr. Lyon asked you if Bole didn't ask you if deep down in your heart you didn't believe that he, Bole, was the inventor of this key in controversy? When was it with relation to the time when you attended that ball game?

A. That was the time when he disclosed the signature. I don't remember what hour it was. It was some time between half-past two and five o'clock.

RDQ. 141. And do you remember what time it was with relation to the time that Mr. Wilson was giving his first testimony in this case?

A. No, sir. I don't know when the case was started or when Mr. Wilson gave his testimony.

RDQ. 142. What did Mr. Bole say he was going to do with that purported signature? [385—327]

Mr. LYON.—Objected to as leading and as assuming facts not testified to by the witness and not the proper method of proof.

A. As I remember, Mr. Bole didn't state; in fact, he didn't say what was covered up, whether it was an under-reamer or a key, or what it might be.

(Testimony of A. G. Willard.)

RDQ. 143. (By Mr. BLAKESLEE.) Did he state to you his object in showing you this, whatever it was, partially obscured?

A. No; I don't remember that he did.

RDQ. 144. Did you ask him what the rest of it was that he covered up? A. No, sir.

RDQ. 145. Did he ever show it to you again?

A. No, sir.

RDQ. 146. Was there any other ball game occasion when these matters were taken up in any way between yourself and Mr. Bole, including the conversation when you were asked whether you did not believe deep down in your heart that Bole was the inventor of this key and you denied such statement?

Mr. LYON.—The question is objected to as misstating the testimony of the witness.

RDQ. 147. (By Mr. BLAKESLEE.) When you were asked whether you had not said that deep down in your heart you believed Bole was the inventor of this key, and denied such statement?

A. We had a number of talks at the ball game before that time and since that time, and there may have been something said regarding this interference.

RDQ. 148. When did you last talk with Mr. Bole about this interference? A. Last Thursday.

RDQ. 149. Where was that?

A. In a machine on the way down to the ball game.

[386—328]

RDQ. 150. Did you attend the ball game with Mr. Bole?

(Testimony of A. G. Willard.)

A. Last Thursday afternoon. Yes, sir.

RDQ. 151. What did Mr. Bole say to you about the interference on that occasion.

A. I don't know as there was very much said. It was kind of referred to, and that is about all.

RDQ. 152. Did he ask you if you were going to testify again in the case?

A. No; I don't think he did.

RDQ. 153. Are you able to state positively whether or not the purported signature of W. H. Fahnestock on Bole's Exhibit January 27, 1911, Sketch, is what Mr. Bole showed you in June of this year at the ball game, when he obscured what was above and beneath such purported signature?

Mr. LYON.—Objected to as leading.

A. No, sir.

RDQ. 154. (By Mr. BLAKESLEE.) Referring now to the testimony of Mr. Bole in this interference, and to question 38 and the answer thereto, in which he states as follows: "But at the same time I told Mr. Willard to go ahead and make up this reamer, and as soon as I got back we would make it up and ship it out." What have you to say as to that?

Mr. LYON.—Objected to as not rebuttal and not redirect examination.

A. I don't remember that part of his letter.

RDQ. 155. (By Mr. BLAKESLEE.) Did Mr. Bole in that letter tell you to go ahead and make up this reamer and at the same time say that as soon as he got back you would make it up?

(Testimony of A. G. Willard.)

Mr. LYON.—Objected to as not rebuttal and as leading.

A. I don't remember of it.

RDQ. 156. (By Mr. BLAKESLEE.) Are you acquainted with August F. Adams, the party who testified in behalf of Mr. Bole? [387—329]

Mr. LYON.—Objected to as not redirect examination.

A. Yes, sir.

RDQ. 157. (By Mr. BLAKESLEE.) How long have you known Mr. Adams?

Mr. LYON.—The same objection.

A. Possibly four or five years.

RDQ. 158. (By Mr. BLAKESLEE.) How did you meet him?

Mr. LYON.—Objected to on the same grounds.

A. In one of our trips to the oil fields I met him at the Maricopa shops.

RDQ. 159. (By Mr. BLAKESLEE.) Did you ever meet him in company with Mr. Bole?

Mr. LYON.—The same objection.

A. Yes, sir.

RDQ. 160. (By Mr. BLAKESLEE.) At any place outside of the shop of the Wilson & Willard Manufacturing Company?

Mr. LYON.—The same objection.

A. Yes, sir.

RDQ. 161. (By Mr. BLAKESLEE.) Under what circumstances?

Mr. LYON.—The same objection.

A. I went out in a machine with him together.

(Testimony of A. G. Willard.)

RDQ. 162. (By Mr. BLAKESLEE.) Have you ever been hunting with him and Mr. Bole?

Mr. LYON.—The same objection.

A. No; I believe not.

RDQ. 163. (By Mr. BLAKESLEE.) Is he a friend of Mr. Bole's?

Mr. LYON.—The same objection.

A. Yes, sir.

RDQ. 164. (By Mr. BLAKESLEE.) Do you know how long he has known Mr. Bole?

Mr. LYON.—The same objection.

A. No, sir. [388—330]

Mr. BLAKESLEE.—That is all.

Mr. LYON.—With the same reservations noted before commencing the cross-examination, I recross the witness.

Recross-examination.

(By Mr. LYON.)

RXQ. 165. Please explain what you mean by your first answer on redirect examination to question No. 112, that you never saw any of the sketches. The reporter will read that question to you now. (Question No. 112 read to the witness.)

A. I don't remember that the sketches accompanied the letter.

RXQ. 166. Then there were no sketches accompanying the letter? A. No, sir.

RXQ. 167. No sketches in the letter, or part of the letter? A. Not that I saw.

RXQ. 168. And you never told Mr. Bole that that reamer would not be built because Mr. Wilson

(Testimony of A. G. Willard.)

didn't approve of it, did you?

A. I may have told Mr. Bole that Mr. Wilson would not approve of it.

RXQ. 169. Please answer the question yes or no.

A. Just read the question again. (Question read.)

No, sir.

RXQ. 170. It is a fact, is it, that Mr. Bole received either a 10 or a 15 per cent commission on the sale of this reamer to the Sunset-Monarch Oil Company in September, 1908? A. I don't know.

RXQ. 171. Have you no recollection as to whether that is a fact? A. None whatever.

RXQ. 172. Are you prepared now to state positively that there was no sketch of any kind, either attached to or a part of this Sunset-Monarch Oil Company order, sent in by Mr. Bole in September, 1908? [389—331]

A. No sketch that I saw.

RXQ. 173. Never saw any such sketch at all, did you? A. No, sir.

RXQ. 174. No sketch of any kind of the key device for that reamer? A. No sketch whatever.

RXQ. 175. You are positive of this, are you?

A. Yes, sir.

RXQ. 176. This Sunset-Monarch order for the under-reamer was for a standard under-reamer that the Wilson & Willard Manufacturing Company were then making? A. No, sir.

RXQ. 177. What was it, then?

A. I don't know.

RXQ. 178. Since thinking this matter over for

(Testimony of A. G. Willard.)

a couple of months, since giving your previous deposition you decided that you didn't know what that order was, did you?

Mr. BLAKESLEE.—Objected to as not properly based upon the testimony of the witness.

A. I don't know definitely what it was; no, sir.

RXQ. 179. (By Mr. LYON.) What is your best recollection?

A. My best recollection was that there was to be some change.

RXQ. 180. Some change in what part of the reamer?

A. In the holding means for holding the block or the key.

RXQ. 181. Your present recollection is that there was no sketch of said holding means, as proposed, accompanying such order from Mr. Bole?

A. Yes, sir.

RXQ. 182. And I suppose your present recollection is that there was no description of such holding means as proposed accompanying [390—332] such order as received from Mr. Bole?

A. There was some mention in the letter that he wanted something changed. There was some change desired, but what that change was I don't know.

RXQ. 183. Are you prepared to state positively that there was not a sketch of such change in that letter? A. Yes, sir.

Mr. LYON.—That is all.

(Testimony of A. G. Willard.)

(Second) Redirect Examination.

(By Mr. BLAKESLEE.)

RDQ. 184. Do you recollect what it was, if anything, that you told Bole, referring to the Sunset Monarch Oil Company reamer order, that Wilson might not approve of?

Mr. LYON.—Objected to as not re-redirect examination, and as not rebuttal, the matter having been fully gone over in the former deposition of this witness, as a part of Wilson's *prima facie* case.

Mr. BLAKESLEE.—The record speaks for itself and the procedure likewise.

A. I told Mr. Bole that Mr. Wilson would object to sending out anything but the standard reamer.

RDQ. 185. Whatever those changes proposed with respect to this reamer may have been, did you ever discuss them again with Mr. Bole or anybody else prior to the early part of February, 1911?

Mr. LYON.—Objected to upon each of the grounds stated in the objection to the preceding question, and as leading.

A. No, sir.

RDQ. 186. (By Mr. BLAKESLEE.) Do you remember whether the letter ordering that reamer for the Sunset-Monarch Oil Company in 1908 said anything about proposed changes in cutter construction? [391—333]

Mr. LYON.—Objected to on each of the grounds stated to the proceeding questions.

A. To the best of my recollection the letter did not refer to cutters at all.

(Testimony of A. G. Willard.)

RDQ. 187. (By Mr. BLAKESLEE.) Do you recollect anything that that letter or order said or proposed in any manner relating to any change specifically in any part of the under-reamer as then manufactured by the Wilson & Willard Manufacturing Company?

Mr. LYON.—The same objection as last noted upon the record.

A. Not specifically, no.

RDQ. 188. (By Mr. BLAKESLEE.) Are you still on friendly terms with Mr. Bole?

A. Yes, sir.

Mr. BLAKESLEE.—That is all.

Mr. LYON.—We move to strike the entire deposition of this witness from the record, and each part and parcel thereof, and each question and answer, on the ground that the same is not rebuttal testimony, and this motion applies equally to the direct, cross, redirect, recross and second redirect, and upon each of the grounds stated in the objections to the questions. This motion will be considered as submitted at the hearing, and notice is given under the stipulation in this case that the reading over of this deposition by the witness, and his signature thereto, is demanded.

Mr. BLAKESLEE.—The notary will comply with such requirement.

Mr. BLAKESLEE.—In view of the continued absence from town of the proposed witness Fahnestock and of the enforced absence from town of the proposed witness Carlson, we are forced to take an ad-

(Testimony of A. G. Willard.)

jourment at this point, namely, at 4:43 P. M., until the following day, and as we are not prepared to predict as to the return of these witnesses definitely, counsel for Bole may have [392—334] his choice of an adjournment until the hour of 10 o'clock A. M. of to-morrow or until the hour of 2 o'clock P. M. to-morrow. We expect the witness Carlson to be able to appear by 10 o'clock A. M. to-morrow, but as he is in Riverside or as we understand he is in Riverside, and has been for several days, we cannot predict definitely, although his plans last Saturday were to return here not later than to-morrow morning.

Mr. LYON.—Let us take an adjournment until 10 o'clock, subject to the further adjournment by telephone notice if counsel finds prior to 10 o'clock that he cannot produce such witnesses.

Mr. BLAKESLEE.—That is satisfactory.

(Thereupon an adjournment was taken until to-morrow, October 6, 1914, at 10 o'clock A. M.) [393—335]

A. G. WILLARD, a witness heretofore produced and sworn on behalf of Wilson, being recalled, testifies as follows:

Direct Examination.

(By Mr. BLAKESLEE.)

Mr. LYON.—We object to the further calling of this witness or any other witnesses in this case who have already heretofore been called in rebuttal, as such piecemeal procedure cannot recommend itself to any tribunal. This witness has already been twice on the stand and has told diametrically oppo-

(Testimony of A. G. Willard.)

site stories, and his examination should be concluded and he should not be brought back time after time.

Mr. BLAKESLEE. — The witness' testimony speaks for itself, and there never comes a time when a witness cannot testify in any case.

Q. 189. I show you, obscuring the title, a number of papers bearing handwriting and other matter, attached together, and I will ask you if you are familiar with any of the handwriting you find on any such papers?

Mr. LYON.—Objected to as leading, incompetent, no foundation laid, and as irrelevant, immaterial, there being no disputed or denied handwriting or signature in this case. There is no foundation for any testimony in regard to said signatures, and such signatures can have no bearing whatever upon this case. This objection will be understood as taken and repeated to any testimony given or questions asked this witness with relation to any handwriting in the case, or to any of the exhibits in the case, without the necessity of hereinafter specifically repeating the same upon the record.

A. Yes, sir; I am.

Q. 190. (By Mr. BLAKESLEE.) Can you state whose handwriting [394—336] any such handwriting is?

A. Miss Laura Dauphine, W. H. Fahnestock, E. C. Wilson and A. G. Willard.

Q. 191. Please point out and designate any instances of the handwriting of W H. Fahnestock that you find there, designating the portions specifically

(Testimony of A. G. Willard.)

which are in such handwriting.

A. On check No. 12252, made out by W. H. Fahnestock, "Pay to the order of W. H. Fahnestock"—the name "W. H. Fahnestock." Check No. 4622 is in the handwriting of Miss Dauphine. Also check No. 5025.

Q. 192. Let me interrupt and ask you, please, to only point out the portions which consist of the handwriting of Fahnestock, and identify such portions by the paper in some way.

A. Check No. 12252, check No. 4367.

Q. 193. Please mention the portions of such checks which are in his handwriting.

A. His name, and also the amount of the checks—the amount in figures. The signature to the trial balance of November 30, 1912.

Q. 194. Do you find any indorsements on any of the checks you have mentioned? A. Yes, sir.

Q. 195. What handwriting constitutes such indorsements?

A. Check No. 4622, check No. 12252, check No. 4367, check No. 5025, check No. 4840, check No. 4738 and check No. 4906 have all been indorsed by the signature of W. H. Fahnestock.

Q. 196. Do you know this person W. H. Fahnestock? A. Yes, sir.

Q. 197. Please identify him.

A. He has been in the employ of the Wilson & Willard [395—337] Manufacturing Company as bookkeeper for the past three or four years.

Mr. BLAKESLEE.—Let it now be shown that the

(Testimony of A. G. Willard.)

papers just submitted to the witness are the group of papers connected together and marked "Wilson's Exhibit C, Specimens of Fahnestock's Handwriting."

Q. 198. I now show you, similarly concealing the indorsements on the back of the last sheet, a number of other papers grouped and attached together, and I will ask you if you are familiar with any handwritings you find there?

A. Yes; I am familiar with the signature of "E. F. Grigsby," who has indorsed checks Nos. 4712, 4795, 4592, 4397 and 5032.

Q. 199. Do you know this party Grigsby?

A. Yes, sir.

Q. 200. Please identify him.

A. He was employed by the Wilson & Willard Manufacturing Company.

Q. 201. At what time?

A. I cannot say positively. I believe it was 1911 and 1912.

Q. 202. That is the same Wilson & Willard Manufacturing Company whom you have referred to in connection with the handwritings of Mr. Fahnestock and of which you were in 1911 vice-president, as you have testified? A. Yes, sir.

Mr. BLAKESLEE.—Let it be shown that the group of papers just submitted to the witness compose "Wilson's Exhibit 'B,' Specimens of Grigsby's Handwriting.

Q. 203. You testified when last upon the stand that your recollection had improved or changed

(Testimony of A. G. Willard.)

somewhat since the time of giving your previous testimony. Can you now assign your reason for such change or improvement? [396—338]

Mr. LYON.—The question is objected to as leading, and upon the further ground that it is merely cumulative, the matter having been fully gone over in the deposition of this witness taken in alleged rebuttal, and it is not examination with regard to any new matter or any omitted fact; and in view of the character of this case and the character of the testimony of the witness, and the procedure of the witness Wilson and of his witnesses in this case, it is clear that this objection should be sustained as a violation of all the rules of evidence and procedure. The witness was interrogated fully in regard to this subject matter when last upon the stand.

Mr. BLAKESLEE.—We have met this argument before, and the record speaks for itself.

A. After reading the testimony of R. E. Bole.

Q. 204. You mean the other party to this interference?

Mr. LYON.—The same objection.

A. Yes, sir.

Q. 205. (By Mr. BLAKESLEE.) What effect did the reading of such testimony produce in your mind?

Mr. LYON.—The same objection.

A. Regarding the sketch or supposed sketch which was supposed to accompany the letter of 1908.

Q. 206. (By Mr. BLAKESLEE.) What did that letter have to do with? That is, what did it relate to?

(Testimony of A. G. Willard.)

Mr. LYON.—The same objection, and the further objection is urged to this whole line of testimony and to all the testimony of this witness heretofore given in this deposition and hereafter to be given, as not rebuttal, and a motion is made to strike the same from the record and exclude it from consideration on this ground, the witness having been fully interrogated on all these matters in his deposition given as apart of the [397—339] *prima facie* proofs in behalf of the party Wilson.

Mr. BLAKESLEE.—We have not finished our interrogations yet.

A. It related to an order for a 9 $\frac{5}{8}$ " Wilson under-reamer sold to the Sunset-Monarch Oil Company.

Q. 207. Did you ever communicate or discuss with Mr. E. C. Wilson, party to this interference, with regard to that order you have just mentioned, or anything connected with it, subsequent to the time the order was taken and filled, and prior to the commencement of this controversy between Mr. Bole and Mr. Wilson?

Mr. LYON.—Objected to as leading, and upon each of the grounds stated in the objection to the question heretofore, and the motion addressed to the preceding question, and the same motion is made in relation to this question and the answer to be given thereto. This matter has been fully threshed out twice in the testimony of this witness heretofore given.

Mr. BLAKESLEE.—The record speaks for itself.

A. Not that I remember.

(Testimony of A. G. Willard.)

Q. 208. When did you first hear of or when did there first come to your knowledge a single-piece key, such as you have testified as now being made as part of the Wilson under-reamer of which we have general example in "Wilson Exhibit Wilson Reamer No. 255"?

Mr. LYON.—Objected to as leading, not rebuttal, calling for a conclusion of the witness and not for a statement of facts, and not the proper method of proof; and as having been already twice gone over by the witness, and not the proper procedure; and a motion is made to strike the question and answer from the record on each and all of these grounds.

Mr. BLAKESLEE.—The record speaks for itself.

A. In the early part of 1911, in the shop of the Wilson & [398—340] Willard Manufacturing Company.

Q. 209. And how did such key then come to your knowledge first?

Mr. LYON.—The same objection as last noted on the record, and the same motion.

A. The key was made in the shop of the Wilson & Willard Manufacturing Company for Wilson reamers.

Q. 210. (By Mr. BLAKESLEE.) When did you first see a drawing or sketch of this Wilson reamer 1-piece key?

Mr. LYON.—The same objection as last noted on the record, and the same motion.

A. January or February of 1911.

Q. 211. (By Mr. BLAKESLEE.) Who made or

(Testimony of A. G. Willard.)

produced this sketch, if you know?

Mr. LYON.—The same objection, notice and motion.

A. I don't know.

Q. 212. (By Mr. BLAKESLEE.) By whom was it shown to you?

Mr. LYON.—The same objection, notice and motion.

A. I don't remember that, either.

Q. 213. (By Mr. BLAKESLEE.) Where did you see this sketch?

Mr. LYON.—The same objection, notice and motion.

A. In the office of the Wilson & Willard Manufacturing Company.

Q. 214. (By Mr. BLAKESLEE.) What was the nature of the sketch or drawing?

Mr. LYON.—The same objection, notice and motion, and upon the ground that it is incompetent, not the best evidence, no foundation laid for the introduction of secondary evidence.

A. As I remember, the first sketch that I saw of a 1-piece Wilson key was after they had been manufacturing the key and a blue-print made of it. [399—341]

Q. 215. (By Mr. BLAKESLEE.) And you refer now to the blue-print?

Mr. LYON.—The same objection, notice and motion.

A. Yes, sir.

Q. 216. (By Mr. BLAKESLEE.) Do you know

(Testimony of A. G. Willard.)

under whose direction this drawing or blue-print was made?

Mr. LYON.—The same objection, notice and motion.

A. No, sir; not positively.

Q. 217. (By Mr. BLAKESLEE.) What is your best recollection as to that?

Mr. LYON.—The same objection, notice and motion.

A. I suppose it was made on the direction of Mr. Wilson.

Mr. LYON.—We move to strike the answer from the record and exclude it from consideration on each of the grounds stated in the objection to the question, and upon the further ground that it appears from the answer of the witness that it is hearsay and the guess or conclusion of the witness and not a statement of facts, and not within his personal knowledge.

Q. 218. (By Mr. BLAKESLEE.) Do you know anything to the contrary?

Mr. LYON.—The same objection, notice and motion.

A. No, sir.

Q. 219. (By Mr. BLAKESLEE.) Who do you believe to be the originator of this 1-piece Wilson under-reamer key we have been discussing?

Mr. LYON.—The same objection, notice and motion; and the further objection that it is incompetent, not the best evidence, calling for a mere conclusion and belief of the witness and not for a state-

(Testimony of A. G. Willard.)

ment of facts, and not within his personal knowledge, and incompetent for any purpose in the case.

A. The first key I ever saw was made at the Wilson & Willard Manufacturing Company. [400—342]

Q. 220. (By Mr. BLAKESLEE.) Have you any belief as to who was the originator of this style of key?

Mr. LYON.—The same objection, notice and motion as noted to the preceding question.

A. I believe Mr. Wilson was the designer of it.

Q. 221. (By Mr. BLAKESLEE.) Which Mr. Wilson?

Mr. LYON.—The same objection, notice and motion.

A. E. C. Wilson.

Q. 222. (By Mr. BLAKESLEE.) You mean the party to this interference?

Mr. LYON.—The same objection, notice and motion.

A. Yes, sir.

Mr. BLAKESLEE.—That is all.

Mr. LYON.—Without waiving any of the objections to the alleged deposition of this witness, but subject to the motion to strike out and exclude the same and each question asked of and answer given by the witness, and to abide by the ruling thereon, I cross-examine the witness, it being understood that any questions asked the witness on cross-examination or answers given by him are subject to the same objection and motion.

(Testimony of A. G. Willard.)

Cross-examination.

(By Mr. LYON.)

XQ. 223. Do you mean to say that you never have at any time talked in any manner with Mr. E. C. Wilson alone or in the presence of anyone else, or talked to anyone else in the presence of E. C. Wilson, in regard to the said letter and order of September, 1908, for said $95\frac{1}{8}$ under-reamer for the Sunset-Monarch Oil Company? A. No, sir.

XQ. 224. When have you talked with Mr. E. C. Wilson in regard to [401—343] such order and letter? A. After the trouble with Mr. Bole.

XQ. 225. On how many different occasions have you talked with him in regard thereto?

A. I don't remember.

XQ. 226. A number of times?

A. Yes, sir.

XQ. 227. Since your return from your hunting trip, and just previous to your being called as a witness, in rebuttal, in this case, you had a further talk with Mr. Wilson in regard thereto, did you?

A. I met Mr. Wilson in Mr. Blakeslee's office one afternoon. The case was not discussed very extensively.

XQ. 228. The question of this 1908 Sunset-Monarch Oil Company order was discussed, wasn't it?

A. No, sir.

XQ. 229. No mention whatever made of it?

A. No, sir; except in the reading of Mr. Bole's testimony.

XQ. 230. You read that in the presence of E. C.

(Testimony of A. G. Willard.)

Wilson and Mr. Blakeslee, did you?

A. Not all of it; no, sir.

XQ. 231. Parts of it?

A. I think it was mentioned—parts of it were mentioned, as I remember.

XQ. 232. I show you “Bole’s Exhibit Fahnestock Signatures Nos. 2 to 6, inclusive, for Identification,” and ask you to look at them and state whether or not they are the signatures of W. H. Fahnestock.

A. Yes, sir.

Mr. LYON.—The documents just handed the witness are offered in evidence as “Bole’s Exhibit Fahnestock Signatures Nos. 2, 3, 4, [402—344] 5 and 6 respectively.”

(The said documents heretofore offered and marked for identification, are now marked “Bole’s Exhibits Fahnestock Signature Nos. 2, 3, 4, 5 and 6,” respectively, together with the title of the court and cause and the date upon which the same were offered in evidence.)

XQ. 233. (By Mr. LYON.) I also show you “Bole’s Exhibit Fahnestock Signature No. 1.” Is that Mr. Fahnestock’s handwriting signed thereto?

A. Yes, sir.

XQ. 234. I show you “Bole’s Exhibit Sketch No. 1 for Identification,” and ask you to state if that is the signature of Laura A. Dauphine attached thereto?

Mr. BLAKESLEE.—Objected to as not cross-examination and not rebuttal.

A. Yes, sir.

(Testimony of A. G. Willard.)

XQ. 235. (By Mr. LYON.) Are you acquainted with the other signatures upon this exhibit?

A. I have known the witness Harry S. Naphas, but I wouldn't want to say that I was altogether familiar with his signature. But I have seen his signature a number of times, and that looks very much like Mr. Naphas' signature.

Mr. LYON.—The document just called to the attention of the witness is offered in evidence as "Bole's Exhibit Sketch No. 1."

(The said sketch, heretofore offered and marked for identification, is now marked "Bole's Exhibit Sketch No. 1," together with the title of the court and cause and the date upon which the said sketch was offered in evidence.) [403—345]

XQ. 236. (By Mr. LYON.) Is it still your intention to now testify in this case that you now recollect that in this order of the Sunset Monarch Oil Company for a $9\frac{5}{8}$ reamer in September, 1908, there was neither any description or suggestion of any changes or modifications to be made in the reamer, or any sketch or sketches or any such modifications or changes accompanying such order as the same was received from Robert E. Bole by the Wilson & Willard Manufacturing Company?

Mr. BLAKESLEE.—Objected to as not the proper method of proof, and merely an attempt to summarize or modify the summarization of testimony.

A. The question calls for more than one answer.

XQ. 237. (By Mr. LYON.) Answer it, then.

Mr. BLAKESLEE.—I add to the objection that

(Testimony of A. G. Willard.)

it is calling for a plurality of answers.

A. I am still positive that there was no sketch accompanying the letter of 1908. However, there was some mention of a change, that did accompany the letter.

XQ. 238. (By Mr. LYON.) According to your best recollection how was that change referred to or made manifest, either in or in connection with such order?

A. Well, I thought about it a great deal, Mr. Lyon, and I have not been able to form any recollection of it at all regarding the change. I do remember, however, that there was some suggestion in the letter, and that is as far as I can testify.

Mr. LYON.—That is all. [404—346]

Redirect Examination.

(By Mr. BLAKESLEE.)

RDQ. 239. Have you any recollection of what this possible change concerned?

Mr. LYON.—Objected to as not rebuttal, and having been fully gone over with the witness twice, and upon each of the grounds stated in the objections to the questions asked this witness on direct examination, and it is subject to the same motion to strike out and exclude it from consideration; and this will be understood as taken and repeated to each question asked and answer given by the witness on redirect examination, without the necessity of repeating the same upon the record.

A. Absolutely none.

Mr. BLAKESLEE.—That is all.

(Testimony of A. G. Willard.)

Mr. LYON.—That is all. The witness will read over and sign this deposition.

Mr. BLAKESLEE.—The notary will see to this finality. [405—347]

Redirect Examination.

(By Mr. BLAKESLEE.)

Q. You have stated that you have always been quite personally friendly with Mr. Robert E. Bole.

Mr. LYON.—That is not cross-examination.

The COURT.—I don't think that is a proper question.

Mr. BLAKESLEE.—It is to show the relation of the parties.

The COURT.—But are you attempting to impeach him?

Mr. BLAKESLEE.—No, sir.

The COURT.—Then it is not proper to ask a question of that kind.

Mr. BLAKESLEE.—Quite the contrary; it is to show that the testimony, if it might have been inclined in either direction to either of these parties, it would more naturally have inclined toward Mr. Bole.

The COURT.—Answer the question. Are you and Mr. Bole friends? A. Yes, sir.

Q. How long have you been friends?

A. I have known Mr. Bole for seven or eight years, at least.

Q. Have you ever had and differences of opinion or falling out?

A. Not till this interference came up.

(Testimony of A. G. Willard.)

Q. When was that?

A. I think the testimony was taken last June or July, somewhere.

Q. When was the difficulty, before or after that?

A. After that.

Q. (By Mr. BLAKESLEE.) Before you gave your last deposition for Mr. Wilson, you were very friendly, and, in fact, attended a ball game with Mr. Bole just before giving that deposition, didn't you?

The COURT.—That is going too far, Mr. Blakeslee.

The WITNESS.—If your Honor would permit me, I would like to [406—348] state that I never had any words with Mr. Bole, at all.

Q. (By the COURT.) There is no feeling of antagonism between you? A. No, sir.

Q. Controversy? A. No, sir.

Recross-examination.

(By Mr. LYON.)

Q. I think it sufficiently appears from your testimony in the interference, Mr. Willard, but it is a fact, that you are engaged in litigation at the present time with Mr. Edward Double, one of the complainants in this suit? A. Yes, sir.

Q. And in several suits pending in this court in regard to infringements of patents?

A. Yes, sir; with Mr. Edward Double. Yes, sir.

Q. And to what extent is Mr. E. C. Wilson indebted to you at the present time in regard to the purchase of your stock in the Wilson & Willard Manufacturing Company?

(Testimony of A. G. Willard.)

Mr. BLAKESLEE.—We object to that as not proper recross, and immaterial; and an improper inquiry into the personal affairs of the witness.

The COURT.—That is going too far. Is Mr. Wilson indebted to you? A. Yes, sir.

The COURT.—That is all that is necessary.

Q. (By Mr. BLAKESLEE.) And that indebtedness is in the matter of the purchase by Mr. Wilson of a certain patent interest, is it not?

A. No, sir; it is my interest in the Wilson & Willard Manufacturing Company. [407—349]

Q. And there is no other indebtedness to you from Mr. Wilson? A. No, sir.

Q. Simply concerning the selling out of your interest in that business to Mr. Wilson?

A. Yes, sir. [408—350]

*In the United States District Court, Within and for
the Southern District of California, Southern
Division.*

IN EQUITY—No. B—19.

ROBERT E. BOLE and EDWARD DOUBLE,
Complainants,

vs.

WILSON & WILLARD MANUFACTURING
COMPANY and E. C. WILSON,
Defendants.

Reporters' Transcript.

VOLUME II.

Filed Apr. 21, 1915. Wm. M. Van Dyke, Clerk.
By Chas. N. Williams, Deputy Clerk. [409]

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**[Testimony of William H. Fahnestock, for
Defendants.]**

WILLIAM H. FAHNESTOCK, a witness produced on behalf of defendants, being first duly sworn according to law, testified as follows:

Direct Examination.

(By Mr. BLAKESLEE.)

Q. Please state your full name, age, residence and occupation, Mr. Fahnestock.

A. William H. Fahnestock; age, thirty-six; occupation, bookkeeper for the Wilson & Willard Manufacturing Company, and residing at 6647 Selma Street, Hollywood.

Q. How long have you been bookkeeper of that company? A. Since September 28, 1910.

Q. Have you with you the ledger account of that company? A. Yes, sir.

Q. In that ledger account is there an account pertinent to the manufacture of Wilson under-reamers and the distribution of the profits of manufacture of such reamers?

Mr. LYON.—We object to that on the ground that it is irrelevant and immaterial.

The COURT.—I don't understand that we are taking an account of profits now.

Mr. BLAKESLEE.—I simply wish to show in corroboration of the testimony of E. C. Wislon by the books of the company that in 1911 and 1912 Mr. Wilson was the only party interested in the reamer business there whatsoever, and that in no way can Mr.

(Testimony of William H. Fahnestock.)

Bole claim that he was associated with that business whatsoever.

Mr. LYON.—That is a mere negative question.

Mr. BLAKESLEE.—I want to show who was the reamer man in that business. That is positive. No claim. In other words, that no claim can be made that Mr. Bole can ride in on this reamer business as being jointly interested, and this reduction to practice having been made constructively on his behalf.
[412—351]

The COURT.—Do the books show an account concerning this reamer?

A. Yes, sir. It is known as the “Under-reamer Account”—

Q. And who gets credit?

A. This under-reamer account is the same as the personal account of E. C. Wilson.

Q. Does it show that?

A. Yes; that is, all the charges against that account are charged against the reamer account, and also the profits go to that account. It is really a personal account of E. C. Wilson.

Q. What do the books show about its being his personal account?

A. Well, it is made out as the “Wilson Under-reamer Account.”

Q. Just called the “Wilson Under-reamer Account”? A. Yes, sir.

Q. Have the books got connected in any way E. C. Wilson with it? A. Yes, sir.

Q. Let us see what it is.

(Testimony of William H. Fahnestock.)

A. Here in the index I have "E. C. Wilson, Manufacturer." "E. C. Wilson Under-reamer Account."

Q. Does that refer to this account? Where is that in the index? A. 226.

Q. It says, "E. C. Wlison Under-reamer Account"? A. Yes, sir.

Q. Then this ledger shows that there is an account kept here with the "E. C. Wilson Under-reamer Account" and it is indexed under the name of "E. C. Wilson, Manufacturer"?

A. That is all one and the same thing.

Q. The same account? A. Yes, sir.

Q. Which is on page 226? A. Yes.

Q. The index shows that fact? [413—352]

A. I believe in the beginning it was called the "E. C. Wilson Manufacturing Account."

Q. (By Mr. BLAKESLEE.) And that account includes the years 1911 and 1912?

A. Yes, sir.

Q. Does the name of Robert E. Bole appear any place in connection with the items of that account?

Mr. LYON.—Objected to as not the best evidence.

The COURT.—The objection is sustained.

Q. (By Mr. BLAKESLEE.) To whom do the proceeds of this account go?

A. E. C. Wilson.

Q. And speaking of E. C. Wilson and the Wilson & Willard Manufacturing Company, you have meant the defendants in this case, have you?

A. Yes, sir.

Mr. BLAKESLEE.—That is all.

(Testimony of William H. Fahnestock.)

Mr. LYON.—No questions. I ask that the witness remain in attendance. We will probably desire to use him later.

Mr. BLAKESLEE.—Do you think you will need him to-day? We will produce him at any time you want him.

Mr. LYON.—I want him here so that when you close I will have a witness. I don't know what you have in the line of your case. If you assure me that you will take the rest of the afternoon, I will excuse him until to-morrow morning.

Mr. BLAKESLEE.—I don't think we will take ten minutes. One other witness is on the way here, and we are ready to produce several witnesses who will testify that they took all their instructions from Mr. Wilson indirectly, and through Mr. Knapp, foreman, as to the making of that first reamer, if your Honor does not include that within your ruling that it is negative testimony.

The COURT.—I think it would be negative testimony. I think [414—353] you can ask Mr. Bole when he takes the witness-stand if he gave any instructions concerning this, and if he says he did, you can call witnesses to contradict him.

Mr. BLAKESLEE.—We will reserve it for rebuttal, then we close our case with the exception of one witness, Mr. Houriet, who is on his way here.

Mr. LYON.—I understand that they reserve simply the right to put Mr. Houriet on the stand, and, no one else, and are to be limited to rebuttal evidence.

Mr. BLAKESLEE.—I want to offer this repro-

(Testimony of William H. Fahnestock.)

duction sketch in evidence which Mr. Wilson identified. It has not yet been offered. I offer it in evidence and ask that it be marked "Defendant's Exhibit Wilson Reproduction Sketch of Sketches of Late January and Early February, 1911." [415—354]

[**Testimony of Albert W. Houriet, for Defendants.**]

ALBERT W. HOURIET, a witness produced on behalf of defendants, being first duly sworn according to law, testified as follows:

Direct Examination.

(By Mr. BLAKESLEE.)

Q. Please state your full name, age, residence and occupation.

A. Albert W. Houriet; age, forty-one; machinist; 1674 West Twelfth, Los Angeles.

Q. Where are you employed at the present time?

A. The Wilson & Willard Manufacturing Company, Los Angeles. California.

Q. That is the defendant in this case, as you understand it? A. Yes, sir.

Q. How long have you been employed by that company?

A. It will be six years the 18th of this coming May.

Q. What is the general nature of your employment there? A. Machinist in general.

Q. How early did you work upon a Wilson under-reamer at that shop, such reamer being fitted with a single-piece key for holding the lower end of the spring?

(Testimony of Albert W. Houriet.)

A. On or about the middle of February, 1911.

Q. What did you have to do with the first reamers of that kind that you worked on?

A. I drove the slot in for the key and drove the tee bar also.

Q. And was the key like that of the Wilson under-reamers which are made at the present time?

Mr. LYON.—Objected to as leading and calling for a conclusion of the witness.

The COURT.—Let him answer the question.

A. Not exactly.

Q. (By Mr. BLAKESLEE.) Can you make a simple sketch showing the [416—355] shape of the key as made for the first reamer you remember of that kind—just a rough sketch?

A. This is sort of a rough sketch of it. There are a few notches there which I sawed in with a hack-saw to put a lever in to pry it up. That was the first experiment with it.

Q. And you made those notches? A. Yes, sir.

Q. Please write “notches” at each of those to make it clear where they were.

(Witness does as requested.)

Mr. BLAKESLEE.—We offer the sketch produced by the witness in evidence as “Defendant’s Exhibit 10.”

Q. From whom did you receive your instructions for making such key?

A. Well, the key was brought to me by the foreman, as near as I can remember.

Q. And you made the notches in with the hack-

(Testimony of Albert W. Houriet.)

saw? A. Yes, sir.

Q. Then what did you do with the key?

A. Well, experimented in getting the key in and out. First tried prying it out, but come to find that I couldn't get it out that way; then I accidentally drove a cape chisel in and saw that it raised it up and I could drive it right out.

Q. By the COURT.—What is a cape chisel?

A. A narrow chisel with a pretty good taper to it.

Q. (By Mr. BLAKESLEE.) Which end of the chisel did you drive in?

A. The pointed end. The cape chisel is made similar to a wedge.

Q. Where did you drive that in?

A. Right at the bottom of the key so that it raised the key up.

Q. Then what did you do?

A. Then I told the foreman, "I guess you don't need no lever [417—356] to pry it out. Here is a simpler way to get it out." And I took an old file there and drove that in, and I said, "You take the tang end of a file and drive it in, and then you can drive the key out."

Q. After you found that it would raise the end of the key that way, what did you do?

A. I told the foreman about it.

Q. Who was your foreman? A. Knapp.

Q. Had you ever seen a single-piece key like that driven out this way before?

Mr. LYON.—Objected to as leading.

The COURT.—Overruled.

(Testimony of Albert W. Houriet.)

A. I never had.

Q. (By Mr. BLAKESLEE.) I show you "Defendants' Exhibit 9" and ask you if you ever saw a piece of metal like that before? A. Yes; I have.

Q. When and where did you first see it?

A. I have seen them similar to that at the Wilson & Willard Manufacturing Company.

Q. What was it used for there?

A. It was used first in the old style reamer in pushing up the block to get the set-screws in.

Q. Can you tell more definitely what time it was that you drove this cape file in under the key and lifted it up and then drove the key out?

The COURT.—He called it a cape chisel.

A. Yes, sir. And then I used a file also—tang end of a file.

Q. By Mr. BLAKESLEE.—For the same purpose? A. Yes, sir.

Q. When was it that you used the first of these for that purpose? [418—357]

A. About the middle of February, as near as I can recollect, of 1911.

Q. I show you a batch of slips of paper attached together and ask you if you know anything about them, and, if so, what?

The COURT.—Can't you make the question more definite? Ask him what they are.

Q. (By Mr. BLAKESLEE.) Do any of these slips bear your name?

A. Yes, sir; here is one. Here is my name on the 22d of February, 1911.

(Testimony of Albert W. Houriet.)

Q. What does that slip with that date signify?

A. It signifies I was drilling on reamer 120—8-inch reamer.

Q. On that date?

A. Yes, sir; on that date.

Q. By referring to these slips are you able any more definitely to locate the time when you first drove the cape chisel or file under the single-piece key and raised it up and then drove it out?

A. It was later than this date.

Q. Later than the 22d of February, 1911?

A. Yes, sir.

Mr. BLAKESLEE.—Let it be shown that the witness just referred to a batch or group of slips, being “Defendants’ Exhibit 6.” That is all.

Cross-examination.

(By Mr. LYON.)

Q. You say you drove a slot through the tee bar and through the body of this reamer for the key?

A. Drilled.

Q. How did you do that?

A. Not with the tee bar in the reamer; no.

Q. But you did it separately—each piece separately? A. Yes, sir. [419—358]

Q. How did you do that? How did you drill those slots? A. With a radial drill.

Q. Can you take these time-slips that you have referred to and tell me what date it was that you drilled each one of those slots of that reamer 120?

A. I think I can; yes, sir.

Q. Please do so then.

(Testimony of Albert W. Houriet.)

The COURT.—Will you tell me what slots you are talking about?

Mr. LYON.—I have the tee bar here.

Mr. STEPHENSON.—I would suggest that you take that and illustrate it to the Court with the instrument itself.

Mr. LYON.—This is the slot in the tee bar that we refer to, Mr. Houriet. Is the slot like the one that I put my finger on? A. Yes.

Q. (By the COURT.) The one the key goes through? A. Yes.

Q. (By Mr. LYON.) And the slot that you say you drilled in reamer 120 is the slot that the key goes through and then passes through the slot in the tee bar. Is that correct?

Mr. BLAKESLEE.—Objected to as indefinite unless it relates to the body. A. Yes, sir.

The COURT.—I think we all understand it now. It is a hole that goes through the two pieces and where the key goes through the two pieces.

Q. (By Mr. LYON.) Take these slips and tell us when it was that you did the drilling of those two slots. A. It don't say here.

Q. Here are three more bundles of time slips. I don't know whether they refer to this same matter or not, but you may look at them and see if you find in them what you are looking for.

A. There is nothing in that bunch to indicate that I drilled the tee bar. [420—359]

The COURT.—Mr. Blakeslee, can you help him out?

(Testimony of Albert W. Houriet.)

Mr. BLAKESLEE.—Yes, sir; I will try to.

The COURT.—All right.

Mr. BLAKESLEE.—I think Mr. Wilson can help him better.

Mr. LYON.—We don't object, but I want to test this witness a little bit.

The COURT.—Well, turn the papers over to the witness.

A. Here is one that relates to the tee bar. That relates to drilling the reamer. Here is the one that relates to drilling the tee bar. It is marked on there "Drilling tee bar."

Q. (By Mr. LYON.) Is that when you drilled this slot in the tee bar? A. Yes, sir.

Q. That is, February 23, 1911? A. Yes, sir.

Q. And you finished the drilling of that slot on that day?

A. On that day? I think I did unless there is another time-slip there.

Q. From that one time slip you have no recollection whether that drilling was all done on that tee bar on that one day, have you?

A. Well, yes. I could drill a tee bar in five hours, I think, or less time than that.

Q. Now, let me ask you as to these dates. You have no recollection except as these time-cards show?

A. How is that?

Q. I say that as to these dates you have no recollection except as the time-cards show?

Q. (By the COURT.) You don't remember when it was done unless you look at these papers?

(Testimony of Albert W. Houriet.)

A. No; not definitely.

Q. Have you an approximate idea in your mind independent of these papers of when it was done?

A. No; I have not.

Q. All right. Then we understand it. [421—360]

A. It was done about the middle of February, but as to the exact date I couldn't tell outside of this.

Q. (By Mr. LYON.) Do you know when that slotted tee bar was finished for this reamer 120?

A. Well, I finished it there, because the machine work was done on it before I got it.

Q. Then it was finished prior to March 8, 1911, was it?

A. Why, to the best of my recollection, yes.

Q. On what day was this reamer 120 first assembled with this notch, slotted tee bar and this one-piece key?

A. Well, it was right after I got through with the drilling—right after the 23d or 22d or along there.

Q. When did you drill the body? A. When?

Q. Yes. A. The date of it?

Q. Yes.

A. The date on that slip gives it the 22d of February, 1911.

Q. That was the drilling of the tee bar, wasn't it?

A. The body. No; the tee bar was—I forget just what the date of the tee bar was there.

Q. You have no recollection independently of that, then? A. What is that?

(Testimony of Albert W. Houriet.)

Q. You have no recollection that serves you at all as to that—

A. No; that is too long to remember.

Q. You don't know that all of the slips for that work are here before you, do you?

A. They certainly are, because it shows it there.

Q. Tell us where the slip which refers to the drilling of the slot in the body is.

A. Here is the two slips for drilling the reamer, February 22, 1911. [422—361]

Q. And what is the other one? One is February 22, and what is the other?

A. The other is February 21, 1911.

Q. Then the reamer was assembled, was it, that day, February 22? A. Not that day; no, sir.

Q. When was it?

A. It was assembled around the 24th or 27th, along there, on different days.

Q. Which day was it first assembled with the single-piece key in it?

A. I couldn't just definitely state which date it was, because there were several different days that I worked on it. I didn't work on it all one day; I would work a little one day and come back on it the next day.

Q. Even with these slips before you you are unable to fix the date on which that reamer was first assembled—that reamer 120—with this tee-bar and this single-piece key, are you?

A. I can't fix the date exactly; no, sir.

Q. You gave a deposition in the interference in the

(Testimony of Albert W. Houriet.)

Patent Office in relation to this matter?

A. I think so.

Q. You were asked in that deposition the following question and gave the following answer: "Q. 31. What did you put under it to raise it up? A. Well, just—anything that I remember that I used—I couldn't get it out very handy, and there was a file there and I drove the file in and that raised it up, and I drove it out the other way. Q. 32. How did you drive it out? A. With a hammer. Of course, the handle of the file is tapered, and by raising up the key I could drive it out." You gave that testimony, did you? A. Yes, sir. [423—362]

Q. You were asked this question on cross-examination, were you. "XQ. 50. I suppose, Mr. Houriet, that it was after you had completed this reamer and had it assembled that you, as you say, discovered that you could remove this single-piece key from it by driving the tang end of a file under the key. Is that correct? A. No, sir. XQ. 51. When was it? A. Before that, when I was experimenting with it trying to get the key out. XQ. 52. What was the condition of the under-reamer at that time? A. I had just been working on it and experimenting with that key to get it in and out. XQ. 53. And on how many different days and different times had you been experimenting in getting the key in and out prior to that time? A. That I couldn't say. It must have been a couple of days. I couldn't say just positively. It has been too long ago. But I know I worked on it." That is a correct statement of your testimony?

(Testimony of Albert W. Houriet.)

A. Yes, sir.

Q. That agrees with your recollection of the facts at the time of giving such deposition on September 29, 1914? A. I think it was; yes, sir.

Q. You were asked this question on cross-examination, were you: "XQ. 61. According to your recollection when was it that you did that last work on that reamer and made this discovery, as you say, that you could remove the key by driving in the tang end of a file? A. I couldn't tell; it has been too long ago." That was your testimony at that time?

A. Yes, sir.

Q. And that was true according to your recollection at the time of giving that testimony?

A. Yes; it was as near as I can remember.

Q. You were also asked this question: "XQ. 62. Have you any recollection whatever of the day of the month? A. No; I have not. XQ. 63. Can you tell me whether it was in January, February or [424—363] March or April? A. It has been too long; I have lost recollection of that. I know the work I did." Did you give that testimony? A. Yes, sir.

Q. You were asked this question on cross-examination: "XQ. 81. Will you state positively that Mr. Knapp delivered that key to you? A. Well, I wouldn't say positively, because he may have told the man that forged it to take it and give it to me as soon as he was through with it, but it was the same thing as him giving it to me. XQ. 82. You have no distinct recollection as to who it was that gave you the key at that time, have you? A. No; I couldn't say

(Testimony of Albert W. Houriet.)

positively. XQ. 83. Have you any recollection as to who it was that forged that key? A. Yes. I can't think of his last name, though. It was a fellow that worked there. We always call him Fred Ricker, or something like that." Is that a correct statement of your testimony given at that time?

A. Yes, sir.

Q. "XQ. 91. How many times did you have to try to get this key out of that reamer before you discovered that you could get it out by simply driving in the tang end of a file, as you say. A. I worked at it two or three hours trying to get it out, and possibly longer than that. XQ. 92. In how many different days? A. That I couldn't say." That is a correct statement of your testimony? A. Yes, sir.

Mr. LYON.—That is all.

Defendants rest. [425—346]

[Testimony of Robert E. Bole, for Plaintiff.]

ROBERT E. BOLE, called on behalf of complainants, being duly sworn, testified as follows:

Direct Examination.

(By Mr. LYON.)

Q. Please state your name, age, residence, and occupation.

A. Robert E. Bole. Thirty-six years of age. My occupation—I am an experienced machinist and practical mechanic.

Q. In what business are you now engaged?

A. In the manufacture of oil well-pumps.

Q. You are a resident of Los Angeles, California?

A. Yes, sir.

(Testimony of Robert E. Bole.)

Q. How long have you been connected with machine-shop work or mechanical work?

A. Since 1894; I believe about twenty-one years.

Q. Where did you first have your experience?

A. In my father's shop, in Pittsburg, Pennsylvania.

Q. And in what line of business was that?

A. Fishing tools for oil wells.

Q. In other words, the manufacture of oil well machinery? A. Yes.

Q. And when did you come to California?

A. 1901; January.

Q. And what has been your occupation since you came to California?

A. Practically the same line all the way through.

Q. And during all that time, then, or practically all that time, you have been engaged as a machinist or manufacturer of oil well machinery?

A. Yes, sir.

Q. You are now manufacturing oil well-pumps under a patent granted to you and under the business designation of the Bole [426—365] Pump Company, are you? A. Yes, sir.

Q. You heard the testimony of Mr. E. C. Wilson and the testimony of Mr. W. W. Wilson in this case, did you? A. Yes, sir.

Q. Referring, first, to the date of the settlement between yourself and the Wilson & Willard Manufacturing Company of the Bole Pump Company account, the date of which is fixed by Defendant's Exhibit "Bole Exhibit W. W. Wilson Cross-exami-

(Testimony of Robert E. Bole.)

nation Exhibit No. 1 for Identification”—

A. Yes, sir.

Q. —will you please explain what conversation, if any, you had on the date of that settlement with Mr. E. C. Wilson or Mr. W. W. Wilson referring to the single-piece key invention herein in issue? You understand what it is, I believe?

A. Yes, sir. I had no conversation at which Mr. W. W. Wilson was present. I had a conversation with Mr. E. C. Wilson, and the subject at the time, up, was, the settlement of the pump account and this reamer key, and I refused absolutely to give Mr. Wilson the reamer key. That was not a part of the agreement at all. I was to keep that.

Q. You have heard Mr. W. W. Wilson's statement that at that time you said you would do nothing further with it, or words to that effect. What have you to say in regard to that testimony?

A. There is no truth in it whatsoever.

Q. Now, you say you had no conversation with Mr. W. W. Wilson on that day. Was he present during those negotiations which culminated in this agreement to which I have called your attention?

A. I don't think— He was not present until the document was dictated and drawn up. He was called in with Mr. Fahnestock, [427—366] the bookkeeper, to witness it.

Q. Why are you certain of that fact?

A. Because when I went down there I would not—I went down for the purpose of effecting a settlement on this pump account, and I would not talk to

(Testimony of Robert E. Bole.)

anybody except Mr. Wilson and Mr. Willard, and the three of us went into the private office there and settled this thing up. The door was shut.

Q. Was there any mention made at that conversation of this letter of yours of January 17th, 1913? If so, state what was said in regard to it.

A. The subject of the key came up at that time, and Mr. Wilson referred to this article in here where I spoke about the key—that I would take this up with Mr. Wilson instead of Mr. Willard. That was the only thing in here I would deal with him personally on. And he undertook to tell me that he had never talked to me about this—that I had never talked to him about it, that he didn't know anything about it; and at that time he wanted me to waive my rights in this thing, and I would not do it.

Mr. BLAKESLEE.—We move that the question and answer be stricken out as not a statement of fact—merely a resume of the conversation. “State what was said,” in other words.

The COURT.—That is the proper course—is to have the witness state what was said.

Q. (By Mr. LYON.) Please give the words of that conversation, in so far as your recollection serves you to do so, and I mean by that the exact words, so far as you can.

A. I can't recall the exact words. That was the sum and substance of it, just as I have stated.

Q. (By the COURT.) State the substance of the conversation, pro and con.

A. Mr. Wilson asked me about this key matter,

(Testimony of Robert E. Bole.)

and wanted to [428—367] know if I wouldn't throw in this key, this invention, in the settlement of that pump account, and I wouldn't do it. I simply refused to do so.

Q. Who was present then?

A. Mr. Willard, Mr. A. G. Willard.

Q. (By Mr. LYON.) Mr. A. G. Willard, and Mr. Wilson and you were together at that time?

A. Yes, sir.

Q. What clause in this letter— Did you have that letter before you?

A. Mr. Wilson had that letter at that time. He had it personally; he had received it. He didn't have it with him at that time, I don't think. I didn't see it.

Q. Didn't have it present?

A. Didn't have it present. He referred to this clause in the letter.

Q. How long after this letter was written was this conversation?

A. It was the date of that contract. February 1st, I think, that contract is dated.

Q. This letter there—

A. This letter was written January 17th, and received January 16th.

Q. How could that be?

Q. (By the COURT.) It is dated January 17th and marked received January 16th. Do you know how that comes about? The other side didn't explain it.

(Testimony of Robert E. Bole.)

A. I can't explain it, your Honor. I wrote it on January 17th.

Q. (By Mr. LYON.) You have no knowledge of this stamp "January 16, 1913, Received," have you, on this letter? [429—368] A. No, sir.

Q. You never saw that letter with that on until it was offered in evidence in the interference proceeding? A. No, sir.

Q. Now, then, Mr. Bole, when did you first become associated with the Wilson & Willard Manufacturing Company?

A. I can't give the exact date. It was in, I believe, the fall of 1907.

Q. And what were you doing during the month of September, 1908?

A. I went north, to Maricopa, California, to take charge of the shops of the Sunset-Monarch Oil Company.

Q. How did you come to go there at that time?

A. I was employed by the general foreman, Mr. R. L. Heber, by letter, to go up there.

Q. And you left the Wilson & Willard Manufacturing Company, approximately what was the date, in September, 1908? A. The 12th, I believe.

Q. And you went from there to Maricopa?

A. Went from there to Maricopa.

Q. Now, please go ahead and tell us how long you stayed in Maricopa.

A. I was away from the shops of the Wilson & Willard Manufacturing Company, on that trip, from the 12th to the 20th of September. When I got to

(Testimony of Robert E. Bole.)

—I had gone to Maricopa to take this position for a period of about three weeks, or until I could help Mr. Heber out. Mr. Heber was a new general foreman there. Until I could help him get the shops started and put in a new man. I was coming back to Los Angeles then. When I got up there, the superintendent at San Francisco sent a foreman, another man, down from Frisco, to take the same place. And Mr. [430—369] Heber didn't know this until this man arrived. And I didn't want to cause any friction between the general foreman and the manager; so I asked Mr. Heber if he would give me an order for some tools, and pay my expenses,—and I secured a job for my brother-in-law at the same time—if he would be willing for us to call it square. He gave me the position for my brother-in-law, and at least to pay my expenses; and he gave me an order for a 9 $\frac{5}{8}$ -inch reamer, two sets of cutters, and an order for a 10-inch bull spear.

Q. Did you have any conversation with Mr. Roy L. Heber in regard to what construction of reamer that should be?

A. Yes, sir. When I wanted Mr. Heber to give me an order for the reamer, he said they had had so much trouble with that reamer that they didn't want it, they didn't want to use it any more. And I explained to him that I thought we could overcome that difficulty, and I didn't just at that time, but I worked out a different style of reamer, and that is this reamer that they are using now, this reamer here.

Q. You mean like Defendants' Exhibit No. 1?

(Testimony of Robert E. Bole.)

A. Yes; Defendants' Exhibit No. 1.

Q. Well, please state your conversation that you had with Mr. Roy L. Heber at that time, or the substance of it.

A. I showed him how I could make this key and put it in this reamer, and explained to him how it would overcome this difficulty he had had of his pins freezing and having had to drill them out. And he gave me an order on the strength of my recommendation.

Q. (By the COURT.) Now, when was that?

A. That was in September, 1908.

Q. 1908?

A. Yes; it was about the 16th, 17th, or 18th, I think. [431—370]

Q. (By Mr. LYON.) Now, you say "you explained to him." Please tell us what you did to so explain to him, and what you said.

A. I drew out on a piece of paper a sketch of this key to show him; showed him how it could be put into the reamer, how it could be taken out; showed him all about it as I had desired to make it, had wanted to make it.

Q. Did you tell him how it would work at that time? A. Yes, sir.

Q. Now, tell us what you said to him as to how it would work.

A. Well, I told him that by putting this slot in and leaving space enough to get the key in it could be driven right in from the side of the reamer and when they got it in there the projection at the bottom

(Testimony of Robert E. Bole.)

would snap down into the bore of the reamer, and the tension of the spring would hold it in place, and it could be taken out by simply driving a drift at one end and prying it up at the lower edge of the opening and it could be driven out from the opposite side.

Q. When you say "driving a drift," what do you mean by "drift"?

A. A drift or punch; anything pointed that would fit in under there.

Q. I only asked that question so that the Court might understand what you meant by the word "drift." Now, after having this conversation, you say Mr. Heber gave you an order for a $9\frac{5}{8}$ inch reamer.

A. $9\frac{5}{8}$ inch reamer, with an extra set of cutters—a set of cutters for a $9\frac{5}{8}$ inch reamer and a set of extra cutters for a 10-inch reamer.

Q. And what did you do with respect to such order?

A. I made out that order and mailed it to Mr. Willard in Los Angeles. [432—371]

Q. What Mr. Willard?

A. Mr. A. G. Willard. He was then manager of the shop of the Wilson & Willard Manufacturing Company.

Q. To what place in Los Angeles was such letter addressed?

A. I think at that time Mr. Willard was getting his mail at his house, at his residence, West Thirty-seventh Place.

Q. Do you know what became of that order or let-

(Testimony of Robert E. Bole.)

ter? A. I do not.

Q. Please go ahead and tell us how you made up such order and what it contained.

A. I wrote this letter to Mr. Willard, and, as I went along in the letter, I made little descriptions or drawings, as was a custom of mine. I didn't send any drawing of it—any separate drawing accompanying it. The description was not among the written matter. As I went along in the letter I described how I wanted this made, and I told him to start to work on the body of the reamer, and they wanted it to be shipped up immediately, as soon as it was completed, and that when I got back to Los Angeles, as the key was the last thing fitted to a reamer, that we could finish up the job and put this key in and send it up there, and I would explain to him more fully how I wanted it, but to start in and make the reamer body itself.

Q. Did you, at that time or any other time, explain this single-piece key device to anyone else?

Mr. BLAKESLEE.—Objected to as calling for a conclusion. Let him be asked as to what he did.

The COURT.—If he had any conversation with anybody else, let him state who it was and what was said.

A. Yes, sir; there was a machinist at the shops of the Sunset-Monarch Oil Company, Mr. Adams.

Q. (By Mr. LYONS.) What is his first name?
[433—372]

A. Gus Adams. And I told him, after I received this order from Mr. Heber that I was going to send

(Testimony of Robert E. Bole.)

up this reamer; and he was not very enthusiastic about it. He found fault with it, and when I explained that—he thought it was the old-style reamer, and when I explained this new reamer to him he was very much pleased with it.

Mr. BLAKESLEE.—We ask that the answer, and each part and parcel thereof, be stricken out as not responsive to the question, not a statement of the facts—merely a conclusion as to a purported conversation. Let us be told what was said.

The COURT.—Your objection is that it does not state the substance or the words?

Mr. BLAKESLEE.—Yes; it does not state the words. It merely states the conclusion of the witness as to what the conversation was.

The COURT.—Objection sustained. State what you said and what the other man said.

Q. (By Mr. LYON.) Giving the words of the conversation as nearly as you can.

A. Mr. Adams said that the pins would freeze in the side of the reamer, and he had so much trouble, or they had had trouble, with all their Wilson reamers along that line. I explained it to him, and drew with chalk on his lathe this new-style reamer that I had gotten up.

Q. (By the COURT.) You mean the new-style key?

A. This new-style key that I had gotten up.

Q. (By Mr. LYON.) Tell us what you drew there, now, in words.

A. I drew a sketch of this key that is now in this

(Testimony of Robert E. Bole.)

reamer here—practically the same.

Q. Well, can't you describe the sketch as you made it?

Mr. BLAKESLEE.—We object to the answer as not responsive.

The COURT.—Objection sustained.

Q. (By Mr. LYON.) Describe to us the sketch that you made at that time on the lathe. [434—373]

A. You mean for me to describe the key itself?

Q. Whatever you sketched.

The COURT.—The lines of what you drew.

A. I could make a sketch of it, but I can't describe it very well. It is a gib-key. It has a projection at the lower half; and it has a projection at the lower half; and it is a sort of a square projection, I would call it, which would extend down into the body of the reamer. It goes into a slot in the side of the reamer.

Q. You say that you could make a sketch in reproduction of what you showed Mr. Adams in chalk on the lathe. Take a piece of paper and make such a sketch. (Witness draws on paper.) Now, you have made a sketch, with a key, in reproduction of the key that you made for Mr. Adams?

A. Yes, sir.

Mr. LYON.—We offer this in evidence as Complainants' Exhibit "C."

The COURT.—It will be received in testimony. Any objection?

Mr. BLAKESLEE.—No objection.

Q. (By Mr. LYON.) Now, proceed, Mr. Bole, and tell us what else was said, by Mr. Adams or by

(Testimony of Robert E. Bole.)

yourself, at that conversation, giving the words of the conversation, if you can, if not, its substance.

Mr. BLAKESLEE.—Objected to as leading, in assuming that anything further was said.

Mr. LYON.—I interrupted the witness to make the sketch.

A. Mr. Adams thought it was an excellent idea.

The COURT.—Strike that out.

Mr. BLAKESLEE.—We move to strike that out.

Q. (By the COURT.) State what he said.

A. Well, he said it was an excellent idea. [435—374]

The COURT.—It may seem to be absurd, but the law requires it to be stated that way.

A. (Continuing.) Well, that was practically all the conversation, because Mr. Adams hadn't anything to do with the order.

Q. (By Mr. LYON.) Now, after receiving this order and sending in this written order for the under-reamer to the Wilson & Willard Manufacturing Company, or Mr. A. G. Willard, where did you go? A. I went from Maricopa to Coalinga.

Q. I show you a piece of paper and ask you if you have ever seen it before? A. Yes, sir.

Q. What is it?

A. It is a postal card I mailed to Mr. Heber, the general foreman at Coalinga, on September 19, 1908, by the postmark on it. It was received in Coalinga on September 20th, by the postmark on it.

Mr. LYON.—We offer this postal card in evidence as Complainants' Exhibit "D."

(Testimony of Robert E. Bole.)

Mr. BLAKESLEE.—No objection.

Q. (By Mr. LYON.) You say you returned to Los Angeles on September 20, 1908? A. No, sir.

Mr. BLAKESLEE.—Objected to as leading. Let the witness tell when he returned.

Mr. LYON.—Well, I thought he had stated.

Q. (By the COURT.) When did you return to Los Angeles?

A. I think it was the 20th I was back in Los Angeles.

Q. 1908? A. 1908.

Q. (By Mr. LYON.) And did you see Mr. A. G. Willard upon your return? [436—375]

A. Yes, sir.

Q. Did you take up with him the matter of this order of this under-reamer? A. I did.

Q. Did you have any conversation with him in regard to it? A. Yes, sir.

Q. What? Please state such conversation, or the substance thereof.

A. Mr. Willard said that he had taken the matter up with Mr. Wilson at Bakersfield; that Mr. Wilson would not make this reamer, and that he said that—

Q. (By the COURT.) Do you mean “key” when you speak about “reamer”?

A. Well, he would not make a reamer with a tee bar and key like this one I wanted to order.

The COURT.—All right.

A. (Continuing.) He said he had made some twenty-five or twenty-six reamers with that style of tee bar in, and that they were weak, and broke, and

(Testimony of Robert E. Bole.)

that Mr. Wilson believed he would call or write the Sunset-Monarch Oil Company and explain this to them, but that he would not make it, and Mr. Willard tried, that is, he made the effort to convince me of the fact that the reamer with this style of tee bar in it was a weak construction and would not stand.

Q. (By Mr. LYON.) What was done, if anything, towards filling the order that you had given for such reamer for the Sunset-Monarch Oil Company?

Mr. BLAKESLEE.—Objected to as leading—assuming anything was done. Let the witness tell whether or not, in the first place, anything was done.

The COURT.—Objection sustained. [437—376]

Q. (By Mr. LYON.) What became of the order of the Sunset-Monarch Oil Company to which you have referred?

A. The order was filled with a reamer of the block and screw type. Mr. Willard said that Mr. Wilson wouldn't stand for any changes whatsoever, and the other reamer of the block and screw type was sent up.

Q. Now, did you ever, at any time, have any conversation with Mr. E. C. Wilson with reference to such Sunset-Monarch order?

A. Yes, sir. When he came down from Bakersfield—I don't remember when he came down. He was at that time in the employ of the Bakersfield Iron Works, and I don't remember. He came down to Los Angeles on different occasions. I didn't know him very well. And later on I took this mat-

(Testimony of Robert E. Bole.)

ter up with him and asked him why he would not make this key in this manner. And he insisted that it would be poor construction to make a tee bar in that manner, and that by leaving the space of the key which would let the key in, it would injure the working parts of the reamer. He would not listen to it at all at that time.

Q. You have heard his testimony that on February 1st, 2d or 3d, 1911, he called a conference in the shop of the Wilson & Willard Manufacturing Company of some of the men, consisting of A. G. Willard, W. W. Wilson, Charles E. Wilcox, yourself, and possibly William K. Knapp, the foreman, and that at that time he exhibited to you and the parties present a sketch of this single-piece key, etc. What have you to say in regard to such alleged facts?

A. There was no such conversation whatever, no such conference whatsoever.

Q. Did you, at any time after 1908, talk with Mr. E. C. Wilson in regard to this single-piece key construction for a reamer?

A. Many times. [438—377]

Q. Do you know anything about how it happened that the Wilson & Willard Manufacturing Company, or E. C. Wilson, took up the manufacture of a reamer, or the making over of a reamer, embodying this single-piece key construction, in 1911?

Mr. BLAKESLEE.—Objected to, as calling for a conclusion.

A. Yes, sir.

Q. (By Mr. LYON.) Please state what facts

(Testimony of Robert E. Bole.)

you know in that regard.

A. Mr. Wilson had been having considerable trouble with the reamer he was using, at that time—that is, “up to that time,” I mean about the 1st of Janaury, up to the 1st of January, 1911. The sales had been falling off in the different fields, and he was having considerable trouble with the reamers. That is, the reamer block and screw type he was using. And he said to me one day there, he says, “I don’t understand why it is that they have so much trouble with this reamer.” I said to him, “Why don’t you make that reamer that I desired for the Sunset-Monarch Oil Company, the one that was ordered by the Sunset-Monarch Oil Company?” He says, “It seems to me Mr. Willard and I had some correspondence about that, didn’t we?” I said, “You certainly did.” He said, “What was that like?” And I had to explain it to him again. He had forgotten all about those conversations, I suppose. At any rate, he asked me to explain it to him again. And I got down on the floor and with a piece of chalk showed him how I could make this one-piece key and put it in the reamer and take it out. And he said, “The trouble with that tee bar is it is weakly constructed,” and I said, “You can strengthen that by increasing the size of it and flattening out the spring to accommodate it.” At that time they were using the round springs; the material they were made of was round material. By flattening it out he could get more space to put in a heavier tee bar. [439—378]

(Testimony of Robert E. Bole.)

Q. (By the COURT.) That is, making the shape of the spring rectangular instead of round, or flat instead of round?

A. Oval, instead of round.

Q. Round? A. Yes.

Q. (By Mr. LYON.) Take the defendants' spring, No. 1, and show the Court what you mean by flat instead of round.

The COURT.—I think I understand it now.

A. (Continuing.) I would call that a rectangular rod. It is that coil.

Mr. LYON.—That is correct. We interrupted you.

Q. Finish your answer with reference to the procedure, please.

A. (Continuing.) And that we could add strength to the key by making it deeper.

Q. (By the COURT.) What do you mean by "deeper"? You mean the width of the key?

A. Through here.

Q. The width? A. Yes.

Q. All right.

A. It was one of those two-piece keys, and he didn't believe, at the time, that key could be gotten out, and he insisted it could not be gotten out. I took the matter up with him on several occasions.

Mr. BLAKESLEE.—We object to the statement of what he didn't believe. We want to know what he said, if anything.

The COURT.—Surely; the witness ought to say that. At any rate, his testimony will not amount to

(Testimony of Robert E. Bole.)

much unless he does state what was said.

A. (Continuing.) He said that he didn't believe it could be taken out. And I argued with him, and this matter was taken up [440—379] on several different occasions. I took it up with him and tried to convince him, and he said it would have to be pried out; and I told him, at the time, a drift could be driven in under the key, and it be raised on one side and the key driven out from the other side. It was a simple proposition on the face of it, to my notion. There is hardly any other way to take it out.

Q. (By Mr. LYON.) Have you any minutes or memoranda by which you can fix the date of any of these conversations with E. C. Wilson in regard to this single-piece key, as prior to the 1st of February, 1911, for instance?

Mr. BLAKESLEE.—Objected to as leading—fixing the time for the witness.

The COURT.—I don't think that is leading. He can't answer that by yes or no.

A. I have a sketch drawn up and witnessed by two parties, which is for a key—which shows this key.

Q. (By Mr. LYON.) I show you a piece of paper of paper and ask you if you have ever seen it before.

A. Yes, sir.

Q. What is it?

A. This is the sketch I refer to.

Q. When was that sketch made?

A. January 27, 1911.

Q. By whom?

(Testimony of Robert E. Bole.)

A. By myself, with the exception of the signatures.

Q. When was this date, "Jan. twenty-seven, nineteen hundred and eleven" placed on this sketch?

A. On January 27, 1911.

Q. And after making this sketch what did you do with it first?

A. I put it with a lot of other drawings that I had. [441—380]

Q. No; I mean before putting it away. Did you show it to anyone at all?

Mr. BLAKESLEE.—Objected to as leading.

A. After making the sketch?

Q. Yes.

A. I just had had it signed and witnessed by these parties.

Q. Who are the two men whose signatures are attached thereto as witnesses?

A. One is the W. H. Fahnestock, who is the book-keeper of the Wilson & Willard Manufacturing Company.

Mr. BLAKESLEE.—That is assuming they are the signatures of the witnesses. The witness has not stated those are the signatures of any men.

The COURT.—I understand that is what he is trying to do now.

Mr. BLAKESLEE.—They may be tracings, and and not the names of anybody.

A. Those are signatures put on there by Mr. W. H. Fahnestock and Mr. E. F. Grigsby.

Q. (By Mr. LYON.) At what time?

A. January 27, 1911.

(Testimony of Robert E. Bole.)

Q. How did they come to sign?

A. At my request.

Q. And where has this sketch been since that date?

A. At that time it was placed—do you want a true history of it?

Q. Yes.

The COURT.—We will now take an adjournment until 10 o'clock to-morrow morning.

Whereupon an adjournment was taken until Friday, March 26, 1915, at 10 o'clock A. M. [442—381]

[**Testimony of A. W. Houriet, for Defendants
(Recalled).]**

Friday, March 26, 1915, 10 o'clock A. M.

A. W. HOURIET, recalled.

Redirect Examination.

(By Mr. BLAKESLEE.)

Q. With respect to the drilling of the body of this reamer 120 which you have testified about, how was that body drilled for the key?

A. For a new key?

Q. Yes.

A. It was drilled right in line with the mouth of the reamer.

Q. Had the body been drilled before for any key?

A. I think it had been drilled for a key before.

Q. What kind of a key?

Mr. LYON.—We object to that on the ground that it is incompetent, no foundation laid. The witness says he did not even know about it. He thinks so.

The COURT.—Well, it goes to the weight of his testimony.

(Testimony of A. W. Houriet.)

Q. (By Mr. BLAKESLEE.) State what you know, Mr. Houriet.

A. The two-piece key reamer.

Q. And bored again to receive this one-piece key?

A. Yes, sir; redrilled.

Mr. BLAKESLEE.—That is all.

The COURT.—What is this distinction between the hole made in that machine for a two-piece key and this one-piece key?

A. What is the difference?

Q. Yes.

A. Well, the two-piece key was right on top of the reamer and these were on the side of the mouth of the reamer and the cutters put on the side. It was at right angles to what the old [443—382] keys was.

Q. I don't think that I understand that. You mean that they were drilled in across the aperture of the old hole or—

A. Is there a reamer here?

Q. There is one over there.

A. The old hole was drilled through here (illustrating on reamer). The new hole was drilled through here, right in line with the mouth of the reamer.

Q. That is, the hole you drilled crossed the hole where? A. Right there.

Q. And that crossed the hole that was there?

A. Yes, sir.

Q. At right angles?

A. Yes, sir; at right angles.

(Testimony of A. W. Houriet.)

The COURT.—Is that all with this witness?

Q. (By Mr. BLAKESLEE.) Was there any further drilling to your recollection done on the body of this reamer 120—any drilling through the body?

A. It was drilled for a bottom bolt.

Q. And where was that drilling done on the body?

A. Right on the end—the bottom end.

Q. The bottom ends of the prongs?

A. Right at the end.

Recross-examination.

(By Mr. LYON.)

Q. From these time-slips can you tell us which day it was that you drilled it for the bottom bolt?

A. I cannot.

Q. Can you tell us which day it was that you drilled this new key-slot?

A. I cannot. They both went in on the same drilling. That is [444—383] the way I drill them now.

Q. Will you please step over to this “Defendants’ Exhibit No. 1” reamer a moment with us? And in that connection I show you a tee bar which is a part of that reamer. Taking the slot that is in that tee bar, show us in this reamer where that slot lies in there when the tee bar is in place.

A. How the tee bar lays when it is in place?

Q. Yes, sir.

A. It lays in that position, just like that, in the reamer.

Q. And what are these projections on the end of the tee bar?

(Testimony of A. W. Houriet.)

A. Those are ears to hold the cutters up, or lugs, rather. Some call them lugs and some call them ears.

Q. Now, was the tee bar of this reamer 120 that you drilled drilled with this slot in the same direction with relation to the ears or projections as this tee bar which is now before us, and a part of "Defendants' Exhibit 1?" A. It was.

Q. (By the COURT.) Now, I understand that this is the hole that you drilled, the hole in the tee bar to receive this key that is in controversy. Now you have got a new tee bar, or was it an old tee bar that you had to do that with?

A. I think it was a new tee bar.

Q. And you drilled the holes in that in the same direction that these lugs or ears on the end of that tee bar?

A. Yes, sir; to the best of my recollection I did.

Q. On the other tee bar used with the double tee, was that at right angles to those lugs or ears, as you call them?

A. Yes, sir; it would have to be, or else you couldn't get them into the reamer.

Q. (By Mr. LYON.) Do you understand drawings? A. Well, yes,

Q. In doing your drilling of this tee bar at the time you [445—384] speak of, did you have instructions before you, or drawings, as to where that slot was to be placed? A. No, I did not.

Q. I will ask you to examine "Defendants' Exhibit Wilson Exhibit Wilson Reamer Key and Tee

(Testimony of A. W. Houriet.)

Sketch of 1911," and particularly the tee bar sketch therein, and state whether it is not a fact that the slot or key-way in that tee bar is shown at right angles to the projections on the tee bar, and at right angles to the slot in the tee bar of "Defendants' Exhibit 1."

Mr. BLAKESLEE.—Objected to as not calling for the best evidence. The drawing speaks for itself, and the witness testifies he did not have a drawing.

The COURT.—The objection is sustained.

Q. (By Mr. LYON.) Having shown you this drawing, have you ever seen this drawing before—the one I last referred to?

A. No, sir; I have not. Not to my best recollection.

Q. Then the production of this drawing would give you no information or aid you in refreshing your recollection as to the manner of drilling this slot in the tee bar of reamer 120?

A. No, I don't think it would.

Mr. LYON.—That is all.

The COURT.—Now, the defendant rests, I understand, except that he desires to put in some records from Washington. Is that right?

Mr. BLAKESLEE.—I understand that we had rested on our main case prior to Mr. Lyon's calling Mr. Bole, and I understand he was taken off for Mr. Houriet to be recalled; so we are through on our main case.

The COURT.—I thought you wanted some certi-

(Testimony of A. W. Houriet.)

fied copies from Washington?

Mr. BLAKESLEE.—We do wish to put those in, but they have not been received yet.

The COURT.—You reserve that right? [446—385]

Mr. BLAKESLEE.—Yes, sir; we reserve that right. And, of course, we ask the right to take sur-rebuttal as may be proper.

The COURT.—Certainly. Proceed, Mr. Lyon. [447—386]

[Testimony of Robert E. Bole, for Plaintiffs
(Recalled).]

ROBERT E. BOLE, recalled.

Direct Examination, resumed.

(By Mr. LYON.)

Q. Referring again to the sketch of January 27, 1911, Mr. Bole, what bearing, if any, has that upon your ability to fix the date upon which you, as you say, explained this one-piece key invention to Mr. Elihu C. Wilson?

A. It was prior to this date that I explained this key invention to Mr. Elihu C. Wilson.

Mr. LYON.—We offer in evidence the sketch referred to as “Complainants’ Exhibit E.”

Q. Referring back, Mr. Bole, for a moment, to this letter and order of the Sunset-Monarch Oil Company reamer in September, 1908, you have heretofore made a reproduction of the sketch or sketches contained in that letter, have you? A. Yes, sir.

Q. I show you a paper and ask you if you know what it is.

(Testimony of Robert E. Bole.)

A. Yes, sir; that is a reproduction sketch that I made in testifying in the interference proceeding, of drawings that were made on the letter in which I ordered the reamer for the Sunset-Monarch.

Q. And according to your best recollection is this a true and correct reproduction of the sketches contained in that letter?

A. Yes, sir; a true and correct reproduction according to my best recollection.

Mr. BLAKESLEE.—Objected to as leading. Let him compare them with what he put in the letter and describe what was in the letter.

The COURT.—The objection is overruled.

Q. (By Mr. LYON.) And, in a general way, will you explain to the Court what these sketches are intended to indicate? [448—387]

A. It is intended to indicate the manner in which I wanted the reamer built. These four broken blocks are supposed to be the body of the reamer cut off—the section of the working parts—that I wanted made. This is the key itself as I desired it then, and here is the key in position in the reamer here, held in place by the tension of the spring above it. The dotted lines on the bottom are supposed to be invisible on account of the tee bar being sketched there. It shows the flat spring in place and the tee bar is supposed to be broken above there.

Mr. LYON.—We offer the sketch in evidence as “Complainants’ Exhibit F.”

Q. After explaining this invention to Mr. E. C. Wilson, and after having these talks with him about

(Testimony of Robert E. Bole.)

that, do you know anything at all in regard to a single-piece key device having been built and made and installed in any under-reamer at any time?

A. Yes, sir.

Q. Did you have anything whatever to do with that? A. Yes, sir.

Q. Please tell what you had to do with it.

A. This key was made up under my instructions. I made out a sketch which was attached to the original shop order. I think that went through the pump department; at any rate, the key was built under my instructions. I did some work on it myself in filing and fitting, and I remember distinctly driving the key in place the first time it was put in the reamer. The key at that time, it was uncertain what taper to put on it to drive under the spring. I remember distinctly that this drawing of mine had on this taper "See Bob for the taper," with my name on it at that time.

Q. When you say it referred to the taper, what taper do you mean? I hand you the key of "Defendants' Exhibit 1" so that you [449—388] may illustrate it to the Court.

A. This taper here.

Q. (By the COURT.) At the end of the upper edge?

A. At what goes under the spring and compresses the spring upward, so that this could be placed in or driven in. It was an uncertain quantity, and we didn't know whether it would spring out when we drove it or whether it would go right in. But the

(Testimony of Robert E. Bole.)

first time the taper was put on it it swung back. A light hammer wouldn't drive it in at all. The first one took a sledge to drive it. The taper was too abrupt.

Q. (By Mr. LYON.) Proceed and tell us what you did.

A. I remember it was the morning when the first key was fitted. Mr. Houriet was fitting up the key and attempting to put the key in the reamer while I was fixing a tool to get it out. And I went over—there was a couple of horses or trestles there and this reamer was laying crosswise on it—flat. And Mr. Houriet had a light hammer and had the key and was attempting to drive it in. And I said, "Let me do that, Al." And I took the hammer and I couldn't drive it in. The taper was so abrupt and the spring had so much tension on it that every time you would hit it would fly out. And I said, "We will hit it with a sledge-hammer," and I hit it with a sledge-hammer and the first crack brought it over this hump and it went in place. After this time Mr. Wilson came along; he had not been there that morning.

Q. You mean Mr. E. C. Wilson?

A. I mean Mr. E. C. Wilson. When he came up he looked at it, and I said, "Well, it is in place" He said, "Yes; you have got it in. Now, let me see you take it out." And I had ground up this tool—I have ground it up this morning, something similar to it. I ground up a tool like that which was made out of a file. I broke half of the file off and ground this end,

(Testimony of Robert E. Bole.)

and by driving that under this point it raised that up to a position where this was. [450—389]

The COURT.—You have it wrong side up.

A. No. The reamer was lying on the side. By driving it in this position it raised this point up until it came out of the bore of the reamer, and then by turning the reamer over and hitting it on the opposite side, we could drive the key out.

Q. (By Mr. LYON.) And I understand you, at that time the reamer was lying on its side?

A. Yes, sir; lying on its side, on a couple of trestles.

Q. Was there anyone else present besides Mr. E. C. Wilson at that time? A. Yes, there was—

The COURT.—Besides who?

Mr. LYON.—Mr. E. C. Wilson.

A. Mr. Houriet was there and I believe Mr. Wilcox was there. I am quite positive Mr. Wilcox was there, and Mr. Naphas, my pump foreman.

Q. You heard the testimony of Mr. Houriet that after this reamer 120 was completed he discovered, after some experimentation, that he could remove this single-piece key therefrom by driving a cape chisel under such key. Do you know anything about any such discovery by Mr. Houriet?

A. No, sir. If he did anything like that he did it after I had taken this key out in the first place, and I don't believe it could be done with a cape chisel, anyway, without chipping the bottom of this business here. This would have to be ground. And that is the first key they say they made, and it doesn't

(Testimony of Robert E. Bole.)

show any marks of chipping.

Q. Now, you have seen this diagram of the key which has been drawn at the bottom of "Defendants' Exhibit Wilson Reamer Key and Tee Sketch of 1911." Did you ever see a key like that in any Wilson under-reamer?

A. I never saw a key like that. The first key did not have these notches in the bottom. [451—390]

Q. To what extent did you direct your attention to this Wilson under-reamer in its building after having first shown how this key could be placed therein and removed therefrom?

A. I didn't have anything to do with building the reamer after that.

Q. Do you know whether this key that you first installed in this reamer was the one that was actually used in the reamer thereafter?

A. No, sir; I don't believe it was. That key was too weak.

Q. Wherein was it too weak?

A. Well, it was made to fit the old slot that was in the old reamer, because it was an uncertain quantity. They had not tried it out yet, and it was only to be made up to be tried out. The heaviest thickness in that one-piece key would be the same size as the slot that was in the reamer. That slot was made to fit a two-piece key in. In other words, this key to go into the same space as the two-piece key would be weaker, and this key was afterwards made stronger.

Q. (By the COURT.) You say that the key that was first put in was put in the old hole of the two-piece key?

(Testimony of Robert E. Bole.)

A. Yes, sir; for the two-piece key, and it had to be thinner than this key to go into that hole.

Q. (By Mr. LYON.) Now, take the key of "Defendants' Exhibit 1," and show the Court what you mean by the first key that you made being weaker. Show him the proportions there that you mean.

A. Well, the hole for the two-piece key would have this thickness. Now, to allow this key to come in—

Q. That is the width of the key?

A. To allow this to go in you would have to drill that a lot more to get this projection in. The two-piece key goes in one at a time, and this has to be driven in all at once, which leaves a space at the top, as shown in my sketch there on [452—391] the order from the Monarch.

Q. This two-piece device wedged at the bottom and top of the slot?

A. Yes, sir; at the bottom and top. It filled the slot entirely. This does not fill the slot by the width of his projection at the bottom or possibly a little more.

Q. (By the COURT.) This key would be held in place by the barrel of this machine, and held in place by the spring? Is that right?

A. No; the two-piece key, the top piece of the two-piece key held the lower part in place, and the top part in its turn was held in place by a plug screwed in behind.

Q. (By Mr. LYON.) Yes, but what the Court wants to know is did the lower edge of the lower part of the key and the upper edge of the upper part of

(Testimony of Robert E. Bole.)

the key contact with the barrel or body portion of the reamer in the shape of a wedge.

A. No. The lower portion rested on the bottom; but there was a space in the upper part for the single-piece key. In the two-piece key it was tight all the way through, it fit so perfectly.

Q. Now, you heard Mr. Houriet's testimony this morning, that the key slot in reamer 120 was drilled at right angles to the key slot in "Defendants' Exhibit No. 1," and that the slot in the tee bar that was made for his reamer 120 was drilled in the same direction as the slot in the tee bar of "Defendants' Exhibit 1." What have you to say in that regard?

A. To my knowledge, and I was around there quite a good deal, they never drilled a tee bar other than this shape here until after the building of the first reamer.

Q. You said "this here" and you refer to the drawing "Defendants' Exhibit Wilson Reamer Tee and Key Sketch of 1911," do you? A. Yes, sir.

Q. You are familiar with drawings? [435—392]

A. Yes, sir.

Q. Take that drawing and point out to the Court wherein the direction of the slot in this drawing of the tee bar differs from the slot of the tee bar of "Defendants' Exhibit 1."

A. In this "Defendants' Exhibit 1" the key comes down this way, and in this reamer the key comes this way.

Q. (By the COURT.) The key in controversy goes in at right angles to the way the two-piece key

(Testimony of Robert E. Bole.)

went in? A. No, sir; not in the first reamer.

Q. Well, they do now? A. They do now.

Q. But in the first reamer the key in controversy went in the same hole that was made in the machine to receive the double-piece key? Is that right?

A. Yes, sir.

Q. (By Mr. LYON.) After you returned from Maricopa in 1908 to the shop of the Wilson & Willard Manufacturing Company on or about September 20, as you have stated, did you explain this invention to or talk to anyone else about it other than A. G. Willard and E. C. Wilson? A. Yes, sir.

Q. To whom?

A. I talked to my brother-in-law. I had wired my brother-in-law J. C. Hubbard to come out and take this position at Maricopa that I had gotten for him from Mr. Heber. When Mr. Hubbard came out here I explained and told him about this key, without revising this reamer.

Q. What did you say to him?

A. I told Mr. Hubbard and explained the method of using the reamers —

Mr. BLAKESLEE.—We object and ask that the statement that was made be repeated if the witness knows. [454—393]

A. I said that in California the trouble they had, I told him about the trouble they had.

Q. (By the COURT.) State what was said. Don't state your conclusions.

A. I said I intended to do away with the two screw plugs that were used in the old-style reamer and put

(Testimony of Robert E. Bole.)

in this single-piece key loosely mounted in there, and hold it in place in the reamer by the tension of the spring above; and the cutters were to be suspended on the tee bar—

Mr. BLAKESLEE.—We object to what was to be done.

Mr. LYON.—He said that is what he said was to be done. He is stating the words he used. He says, “I said so-and-so.”

The COURT.—Yes. Proceed and tell *what said*.

A. —as they were used in the present reamer, with the exception, as I say, of taking one of the two plugs and the old block, I was to put in the slot and single-piece key.

Q. (By the COURT.) You mean you told him that?

A. I told him that.

Q. (By Mr. LYON.) Now, Mr. Bole, where did you meet Mr. Hubbard at that time?

A. I met him at the train when he first came here.

Q. For what purpose?

A. He was on his way to take this position at the Monarch shops at Maricopa. Mr. Hubbard was to have testified about that for me, but he is in Mr. Wilson's employ just now.

Q. (By Mr. LYON.) You say Mr. Hubbard is now in the employ of Mr. E. C. Wilson, or the Wilson & Willard Manufacturing Company? A. Yes, sir.

Q. And has been for some time?

A. Yes, sir.

Q. And he was employed by them since this con-

(Testimony of Robert E. Bole.)

troverſy aroſe? [455—394]

A. He was employed by them, I think—he was employed by them right after the closing of the testimony in that interference.

Q. Do you know where Mr. Hubbard is at the present time ?

A. I do not. He is in the employ of the Wilson & Willard Manufacturing Company, or was.

Q. When did you last hear?

A. Three or four days ago.

Mr. LYON.—That is all.

Cross-examination.

(By Mr. BLAKESLEE.)

Q. You were at Maricopa for six or eight days, were you, at the time you proposed to take that job there in 1908?

A. No; I won't say that I was there that long. My time-book that I kept at that time shows that I was away from work from the 12th to the 20th.

Q. How long were you in Maricopa?

A. I can't say that. I think that I went there probably—the 12th came on Saturday. I was about a week.

Q. How long would it have taken you to have made up one of these single-piece keys such as you say you discussed to Mr. Heber and Adams?

A. At the Monarch shops how long it would have taken?

Q. Exactly.

A. It would have taken possibly a half a day or three-quarters of a day.

(Testimony of Robert E. Bole.)

Q. Why didn't you make one up there and try it out?

A. I gave the order to do that to the Wilson & Willard Manufacturing Company.

Q. Well, they could have used such a key up there to have remedied the troubles they were telling about that they were [456—395] having with the two-piece keys, etc.?

A. No, it is a very difficult matter to drill out that slot in the side of the reamer.

Q. Why was it difficult?

A. Well, it takes a very delicate reamer.

Q. A delicate reamer to ream out the hole?

A. A delicate little rose reamer to ream out the hole. At that time we did it that way. I don't know whether they drill them and drift them now or not.

Q. Didn't they always drill them out?

A. No, sir; they put them on the radial drill.

Q. Was there such a drill at Maricopa at the Monarch shops?

A. I don't know. That was not part of my mission up there, Mr. Blakeslee. I was to get what orders I could and take this position.

Q. Well, there was need of such a key there to remedy the trouble that Mr. Heber and Mr. Adams complained about? A. Yes, sir.

Q. Why didn't you make them up such a key and give it to them the same as you should make a repair job on an automobile?

A. It takes more than the key. It takes a flat

(Testimony of Robert E. Bole.)

spring and such as that, as I desired in that letter.

Q. Why does it take a flat spring? Why couldn't you use a single-piece key in place of the double-piece key?

A. I knew at that time that that split tee bar, as we called it, the construction was weak.

Q. All right. But if one was still standing up, it could be used with a single-piece key as well as the two-piece key?

A. Mr. Blakeslee, to build the reamer as you suggest now, it would take practically a special equipment. Mr. Wilson has special machinery for that.

Q. Yes. But there were two-piece key Wilson reamers in and [457—396] about that field, and they were working about them and repairing them and using them on their own wells, were they not?

A. I don't know whether they had any two-piece key reamers on there. I don't know what they had there except these reamers of the block and screw type. Those were the ones that gave the trouble.

Q. You heard Mr. Heber and Mr. Martin testify on your behalf? A. Yes, sir.

Q. Didn't you hear them say they had trouble with these two-piece reamers, also?

A. I don't recall that.

Q. Assuming that they did, would it not have been possible to substitute a single-piece key of the new design which you originated, as you say, for the two-piece key which had been used in the reamer before?

Mr. LYON.—I object to that. It is a mere suppo-

(Testimony of Robert E. Bole.)

sition. It is not shown that at the time he was there there was a two-piece key reamer there. They may at some time previous to it or after *that had* them, but it is a mere supposition.

The COURT.—The objection is overruled.

A. I don't know that I would have any authority to put that key at that time or any other kind in anybody's reamer.

Q. (By Mr. BLAKESLEE.) From whom would you expect you should have such authority?

A. I would have to get it from whosever reamer I used it in, Wilson's or Mr. Double's, or whoever had a patent on the bottom part of the reamer I had to use.

Q. You think because there was a patent on the reamer you could not do what you wanted to with such reamer as was purchased by somebody else?

A. I am not well enough acquainted with law, but I should think so. [458—397]

Q. In other words, if you owned an automobile that is patented you think you could not repair it if necessary?

Mr. LYON.—Objected to as calling for a mere conclusion on a question of law.

The COURT.—The objection is overruled.

A. I believe in certain cases. You are only asking for my belief. I don't believe you could. I don't believe anybody could repair my pump that is patented.

Q. (By Mr. BLAKESLEE.) You didn't say to Mr. Hubbard and Mr. Adams that you would have to

(Testimony of Robert E. Bole.)

get the permission of Mr. Wilson, the patentee of the reamer, before the order could be filled with that single-piece key? A. No, sir.

Q. Why didn't you?

A. Because I took the order and sent it in. The Wilson & Willard Manufacturing Company were building reamers and I was selling them on a commission, and I had this position and I wanted to get through with my business there and go to Coalinga and sell some pumps, and there was no occasion for me, as I can see,—

Q. (By Mr. BLAKESLEE.) You didn't ask Mr. Willard to get Mr. Wilson's permission to make that change in the reamer, did you, in the letter you sent to Mr. Willard?

A. I don't recall whether it was in there or not. I don't think it was.

Q. Now, you waited from September, 1908, until the early part of 1911 without attempting to do anything in and about the use of such a single-piece key in the reamer?

A. No, sir. I tried right along to get Mr. Wilson to build that reamer. Between those periods of time that you mention I have told people that I thought I would be able to get that reamer built eventually.

Q. And yet during all that period of time you did not go to [459—398] anybody who was having trouble with assembling or disassembling a Wilson reamer of the two-piece key type and suggest that you could remedy such trouble by providing a one-

(Testimony of Robert E. Bole.)

piece key for such reamer, did you?

A. I was very much interested in my pump business at that time, and I was working as high as eighteen hours a day. I was night foreman for the Wilson & Willard Manufacturing Company, and I didn't have any time to do anything like that. I didn't take time to.

Q. You had time to discuss it with Mr. Wilson, although you were working eighteen hours a day?

A. Yes, sir; when he came to the shop.

Q. During that period of time didn't you find it possible to go to ball games as you did subsequently?

A. No, sir.

Q. Not at all? A. No, sir.

Q. And you did not attempt to try to get Mr. Wilson's permission, if you thought it necessary, to make over a two-piece key reamer into such a single-piece reamer?

A. That was what I was trying to do—to get Mr. Wilson's permission; to get him to do it.

Q. You were not trying to get him to do it, but were trying, on the contrary, to get his permission to do it yourself?

A. No, sir. I was trying to get him to make it. He was equipped for that purpose.

Q. Did Mr. Wilson ever tell you that there was a patent on such two-piece key reamer? A. No, sir.

Q. To your knowledge was there ever any such patent issued?

A. To my knowledge there never was.

Q. How long during the period I have last defined

(Testimony of Robert E. Bole.)

were you night foreman of the Wilson & Willard Manufacturing Company shops? [460—399]

A. I can't say that.

Q. Were you night foreman after the business was moved to the new plant at 15th Street and Santa Fe Avenue?

A. No, sir; I don't believe I was working in the shop at that time.

Q. When was it that the shop was moved down there? A. I think about six years ago.

Q. Do you remember the year? A. No, I do not.

Q. Six years would make it 1909, wouldn't it?

A. Six years would make it 1909.

Q. And there would be two years more before 1911 during which you were not night foreman. Is that correct?

A. Well, I won't say positively unless I would look it up.

Q. You would not say positively you were night foreman for those two years at all, would you?

A. No, sir. I think I was night foreman only when I was working nights. The time-books would show that.

Q. It will be assumed that you were not night foreman in the daytime; but you will not say that you were night foreman during 1909 and 1910, would you? A. I don't believe I was.

Q. Now, do you think it would be an invasion of Mr. Wilson's rights to take an under-reamer that was in his shop and put a single-piece key in it?

(Testimony of Robert E. Bole.)

A. It would without any authority from him.

Q. You were working there nights, I suppose, when Mr. Wilson was not there and when nobody would have actually prevented you from slipping a single-piece key into the reamer?

A. Well, it would show up on my time-cards, I should think. I had certain duties to perform.

Q. And these were the reasons, the fear of infringement and [461—400] the fact that you could not persuade Mr. Wilson, and the fact that you were busy, and so forth,—these were the reasons that you did absolutely nothing to try out what you claimed to be your invention from the time you say you disclosed it to Mr. Heber and Mr. Adams in 1908 until you say you had something to do with fitting a reamer in 1911. Is that correct?

A. I had no fear of infringement. I simply would not make it unless I had authority from somebody to do it.

Q. And you didn't think it was sufficiently important to see that somebody fitted any such a reamer for you somewhere?

A. No, but I thought it of sufficient importance to tell people that I thought I would have it made eventually.

Q. If you thought it was of so much importance why didn't you perpetuate the idea by some sketch? That was away back in 1908.

A. Mr. Blakeslee, I thought that was all a matter or record. It is the custom of the Wilson & Willard Manufacturing Company to file the letters and or-

(Testimony of Robert E. Bole.)

ders in the envelope with the time-cards all the way through, and it is the shop custom when you get anything in an order for any new thing, that it is on record. At least that is the general impression around the shop, that if you get anything on a shop order and in the files, that it is a record, and I didn't believe that anybody would ever lay any claim to that but myself.

Q. Did you keep records of that sort in connection with your pump invention?

A. You mean did I keep personal records?

Q. Yes; in your pump business record.

A. Yes, sir. I made out orders from the pump department. They went through the books of the Wilson & Willard Manufacturing Company.

Q. Is it your custom to keep sketches and memoranda of inventions [462—401] you make from time to time? A. Yes, sir.

Q. Have you made any other invention for which you have applied for letters patent since September, 1908? A. Yes, sir.

Q. I am not going to ask you what they are, but can you state approximately how many such applications you filed? A. I would say approximately five.

Q. And were those filed before the application for the patent for the reamer with the key?

A. Yes, sir.

Q. So you filed five other applications for patent from the time you conceived of this invention until the time you applied for the patent in suit?

A. Yes, sir; and they are still pending.

(Testimony of Robert E. Bole.)

Q. Now, you say it was customary for the Wilson & Willard Manufacturing Company to perpetuate and file away orders. Do you know whether Mr. Willard had any such system out at his house at the time you sent in this order as you say in 1908?

A. I don't know.

Q. You say you sent that letter to Mr. Willard's personal address?

A. I don't know that I did. On several occasions I went through the letter files, and I remember that I have written them to his address on West Thirty-seventh Place, and I believe at that time I was sending all his mail there.

Q. I see. Did you not testify yesterday that that is where you sent the letter and that you sent it directly to Mr. Willard?

A. I said that I believed I sent it there.

Q. Now, in the interference proceeding involving your patent in suit, you testified that you mailed a letter to the Wilson & Willard Manufacturing Company ordering this reamer—that is, [463—402] to the company direct—didn't you?

Mr. LYON.—I object to that. Show him the testimony.

A. I probably did.

Q. (By Mr. BLAKESLEE.) This was your testimony given at that time, was it not? “Q. 35. Do you remember when it was that you gave such an order? A. It was during this period of time. I can't just state the date exactly. I went from Maricopa to Coalinga and on our way I mailed a letter to

(Testimony of Robert E. Bole.)

the Wilson & Willard Manufacturing Company at Los Angeles ordering this reamer." You so testified in that case, didn't you?

A. Yes, sir. It was probably sent care of Mr. A. G. Willard on West Thirty-seventh Place. I didn't say positively that that was the case.

Q. That statement made in your previous testimony was correct, was it? A. This statement?

Q. The one which I quoted to you from the previous record. A. Yes, sir.

Q. And your statement made yesterday as to the address of this order letter was not correct?

Mr. LYON.—Objected to as argumentative. There is no conflict in the statement whatever.

(The question is read.)

Mr. LYON.—The question is objected to as not the best evidence, and on the further ground that there is no conflict between the two statements.

The COURT.—Sustained. You can argue the question when we get the facts.

Q. (By Mr. BLAKESLEE.) I will ask you now whether you sent that order to the Wilson & Willard Manufacturing Company or to Mr. Willard.

Mr. LYON.—I object to that question as indefinite and uncertain [464—403]

The COURT.—I have sustained the objection. The witness has testified about that on two occasions and you cross-examined him about it and showed him his previous testimony. That ought to be sufficient.

Q. (By Mr. BLAKESLEE.) Why did you send such an order to Mr. Willard personally?

(Testimony of Robert E. Bole.)

A. I don't believe I sent it to Mr. Willard personally. I believe I sent it to the Wilson & Willard Manufacturing Company, care of Mr. Willard. I believe that. [465—404]

Q. I will show you your testimony of yesterday, question and answer at the bottom of page—Question and answer as follows: “Q. And what did you do with respect to such order? A. I made out that order and mailed it to Mr. Willard in Los Angeles.” Will you please state what you did with that order?

A. Will I please state what I did with that order?

Q. Yes.

A. I mailed it to Wilson & Willard Manufacturing Company in Los Angeles, possibly care of Mr. A. G. Willard. I wouldn't say positively.

Q. Now, was Mr. Heber present in Maricopa in September, 1908, when you made this sketch you say you made with chalk on the body of a lathe for Mr. Adams?

A. I don't know that Mr. Heber was right at the lathe at the time or not. He was backward and forward through the shop. I couldn't say that.

Q. In your previous testimony in the interference, you didn't tell us anything about this chalk key sketch on the lathe, did you?

Mr. LYON.—Objected to as not the proper method of impeachment. You should produce the witness' testimony if you want to ask him.

The COURT.—Objection overruled.

A. I don't remember. I believe I said I made sketches for Mr. Heber and Mr. Adams.

(Testimony of Robert E. Bole.)

Mr. BLAKESLEE.—But you didn't tell us anything about a chalk sketch, did you?

A. You didn't cross-examine me on it.

Q. In your direct examination you didn't say anything about it? A. No; I don't believe I did.

Q. You were present when Mr. Adams testified for you in that [466—405] case, weren't you?

A. Yes, sir.

Q. You heard him then testify that such a chalk sketch was made on the bottom of the lathe for him, didn't you? A. Yes, sir.

Q. Is that the reason you testify to that now?

A. I don't hardly think so. It is just as I remember it, that I made this sketch, got the order from Mr. Heber in the first place. I was explaining this thing to Mr. Adams, and drew this sketch with chalk on the lathe.

Q. You say you testify that you had explained to Mr. Heber that the drift could be driven in under the key to raise it, and then the key could be driven out. At that time did that appear to you to be the best way to handle that key to get it out? A. Yes, sir.

Q. Would that be a better way than using a lever to pry the key up and pry it out? A. Yes, sir.

Q. Why did you come back to the lever idea, or why did you renounce the lifting up and driving out idea and substitute the lever idea in 1911?

A. I didn't substitute it. I drew up this sketch with the lever in it. I was willing to concede anything to Mr. Wilson. The invention was mine. I put that in the drawing and had it fixed in order to

(Testimony of Robert E. Bole.)

add it to the records already of record which I had.

Q. In other words, the invention of the key remover was yours—you hadn't thought of using a lever to pry it out before?

A. Yes, sir. That was mentioned in that letter to Mr. Willard—the driving in of the drifts.

Mr. LYON.—Objected to as not responsive. [467—406]

The COURT.—I think the answer is responsive.

Mr. BLAKESLEE.—Then this sketch was gotten up to show your invention of a key remover, was it?

A. Yes.

Q. It was?

A. It was gotten up to show that I was the inventor of the key and place the date that I did it.

Q. And that was the important thing that you had gotten up that you wanted to perpetuate—that is to say, perpetuate evidence of the fact that you had invented this and not the key remover?

A. I already had it on record at the time, the new style key.

Q. Where was that on record?

A. In the shops of Wilson & Willard Manufacturing Company.

Q. How do you know it was?

A. Well, it was there originally.

Q. When did you see it there?

A. Mr. Willard received the order, as he testified, and filled it.

Q. Did you see the order there in the shop?

A. No, sir.

(Testimony of Robert E. Bole.)

Mr. BLAKESLEE.—Then we ask that the witness' answers as to the orders ever being in the shop be stricken out, as not within his knowledge.

Mr. LYON.—That was on the ground.

The COURT.—Overruled. The motion is overruled.

Mr. BLAKESLEE.—You then thought that on January 27th, 1911, you had invented a new key remover, did you? A. Yes, sir.

Q. Did you think that would be better than the key remover you had brought out in 1908, namely, the system or method of driving a drift under and then driving out the key? [468—407] A. No, sir.

Q. Which did you think was the best?

A. I thought the drift was the best.

Q. And that is what was really adopted finally, wasn't it? A. Well, they called it a drift.

Q. That same thing intended to lift up the key so you could drive it out from the other end?

The COURT.—We will take a recess for five minutes.

(Recess.)

Mr. BLAKESLEE.—You applied for a patent for a pump back in 1906 or 1907, did you not?

Mr. LYON.—Object to that as immaterial and irrelevant.

The COURT.—What is the relevancy of that?

Mr. BLAKESLEE.—I want to show that he applied for a patent within six hours after he conceived of the idea, instead of waiting or something like five years and a half, as he did in this case.

(Testimony of Robert E. Bole.)

Mr. LYON.—It don't make any difference if he did.

The COURT.—Well, while I don't see that it is material, I will overrule the objection.

Mr. BLAKESLEE.—I want to see what he thought of the invention after he got it.

The COURT.—I will overrule the objection.

A. Yes, sir.

Mr. BLAKESLEE.—That patent has been granted?

A. Yes, sir; that invention had been patented.

Q. And that was before you got this key idea?

A. Yes, sir.

Q. That was up in Bakersfield, wasn't it?

A. Yes, sir.

Q. The day you evolved this idea, you went from the shop down to an attorney and immediately took steps to obtain a patent? [469—408]

A. I believe it was the same day.

Q. During the recess, you have had a little talk in the hall with your attorney, Mr. Lyon?

A. Yes, sir.

Q. Can you tell us what it was about?

A. Why, he said, "You are doing all right; take it cool."

Q. What did you say?

A. I don't believe I answered him. Mr. Wilson was walking back and forth there very close, and I understood or thought I understood that he was there to overhear anything that might be said, and I kept my mouth shut from that time on.

(Testimony of Robert E. Bole.)

Q. Before you kept your mouth shut, what did you say?

A. I say Mr. Lyon said, "You are doing fine; take it cool."

Q. Well, hadn't you said anything?

A. Nothing pertaining to this case.

Q. Didn't you say something about a file?

A. No, sir; nothing about a file at all.

Q. Did you ever make up a key and a key remover to fit it that would correspond to the showing of this sketch, Complainants' Exhibit "E"?

A. Didn't make up one.

Q. Why didn't you try out this key remover idea?

A. I didn't think it was any good.

Q. Then you don't think this sketch perpetuates anything really worth while?

A. No, I don't know what value it is in the way of whether it perpetuates anything or not.

Q. So far as anything in this case is concerned, this does not set forth anything that you considered of any particular value?

A. It does. It shows the key prior to any date that Mr. Wilson [470—409] has mentioned that he devised it, so I consider it valuable, yes, sir.

Q. As a matter of fact, you had heard about such a key from somebody before you drew this sketch with this remover, had you not?

A. Key or keys?

Q. Such a key?

A. I didn't hear from anybody else, no, sir. I had discussed it.

(Testimony of Robert E. Bole.)

Q. You had discussed it?

A. Yes, I discussed that key, as I say, but they have mentioned the fact that Bole mentioned it, but I was the original inventor of it, and I never heard anybody say anything about it until I designed it.

Q. If you had such a key as this and such a key remover as this, namely, those features disclosed in this sketch, do you think you could have put the key in the reamer and then taken it out by such remover?

A. I don't know.

Q. Do you think the thing would work?

A. I am inclined to believe that it would bind on top.

Q. Well, I hand you two pieces of metal and ask you to look at them and look at the sketch and see if you can find any discrepancy between the two. Take your time to compare them as to dimensions or any other way.

Mr. LYON.—We object on the ground that it is all immaterial.

The COURT.—Objection overruled.

Mr. LYON.—There is no claim that that is a working drawing.

The COURT.—The pieces of metal submitted are not in evidence, are they?

Mr. BLAKESLEE.—No, sir, not yet. I want to know if it is the same. [471—410]

A. This is practically the same as this (indicating).

Q. Both the key and remover?

A. Practically the same thing; yes, sir.

(Testimony of Robert E. Bole.)

Q. Will you see if that key is the same size as the key in Defendants' Exhibit 1, and if so, place it in that reamer and take it and remove it.

A. It is practically the same size.

Q. Please see if you can remove it from that reamer with that lever.

Mr. LYON.—We object on the ground that it is not cross-examination, and no testimony that that particular lever could remove that key.

Mr. BLAKESLEE.—I want to find out what his purported invention was.

The COURT.—He could not give a practical demonstration without assembling the whole thing.

Mr. BLAKESLEE.—He has got merely to put in the tee bar and then put in the key and draw it out. I don't think it will take long. I want to see what his purported invention is.

The COURT.—What bearing has that on this case?

Mr. BLAKESLEE.—The bearing is this, that he has no single piece of physical evidence that he can produce or has produced pertaining to this main issue of the invention, the key, but he has this sketch which pertains to this purported key remover, which is the only evidence, and I want to say that the only thing he can show us about is something that dates from the time, is a negative thing, in fact, it is a nominal thing.

Mr. LYON.—That don't make any difference. This is simply used as a memorandum to refresh his recollection as to a date.

(Testimony of Robert E. Bole.)

Mr. BLAKESLEE.—And we propose to show that the only thing he ever did in and about this invention was to get up that [472—411] lever and devise it. We propose to show that conclusively before we finish.

The COURT.—I will let him make the demonstration if he wants to.

Mr. BLAKESLEE.—Is it possible to get the hook end of this lever under the key as it is now assembled in this reamer?

(The witness demonstrated with the reamer referred to.)

Mr. LYON.—Let the record show that there is no hammer or any heavy tools present.

A. There is not an opportunity to get it in under.

Mr. BLAKESLEE.—Did you intend to use a hammer in connection with that?

The COURT.—Slip it back until it rests on the—

A. It could be done, I believe, if you had an emery drill to touch this up a little bit more.

Mr. BLAKESLEE.—Did you intend to use a hammer in connection with that key-removing lever when you devised it?

A. Why, yes; that is, if I used it. I don't know that I ever intended to use it.

Q. You got it up not with the intention to use it, but— A. Protect it.

Q. Protect it? A. Yes, sir.

Q. And you never did anything further towards protecting it? A. No, sir.

Q. Did you ever apply for any patent upon it?

(Testimony of Robert E. Bole.)

A. No, sir.

Q. Now, please look at this Defendants' Exhibit 9 and compare it with the little lever you have in your hand, and tell me if there is any preference between the two from your viewpoint for use as a key remover.

Mr. LYON.—Objected to as incompetent, irrelevant and immaterial. [473—412]

A. As removing this and this?

Mr. BLAKESLEE.—Yes.

A. I would say this is a preferable key (indicating). It is a little sharper.

Q. Had you seen such a lever as Complainants' Exhibit 9 at the shop of the Wilson & Willard Manufacturing Company prior to the time you made the sketch of Complainants' Exhibit "E"?

Mr. LYON.—We object to that as irrelevant and immaterial. We are not trying the issue that that thing is patentable here.

The COURT.—I think we are getting on to collateral matters.

Mr. BLAKESLEE.—I am attempting to show, your Honor, that he didn't devise anything, that he had this before him.

The COURT.—Suppose he didn't devise anything; he had the key.

Mr. BLAKESLEE.—Yes, your Honor, this is the only thing that he devised.

The COURT.—Objection sustained.

Mr. BLAKESLEE.—Why did you select, as you say, W. H. Fahnestock and E. F. Grigsby to put

(Testimony of Robert E. Bole.)

their names on this sketch Complainants' Exhibit "E"?

A. I don't remember if I selected them. They were boys in the shop there. Probably they were in the office at the time.

Q. Had they ever witnessed anything else for you?

A. You mean in the way of sketches? Mr. Fahnestock witnessed this document in evidence.

Q. I mean in the way of sketches.

A. I can't recall any. I have some other sketches that were witnessed, lots of them, but I don't recall them.

Q. Did you give them, or either of them, to understand what this sketch concerned or showed at the time you say they witnessed it?

A. Yes, sir. [474—413]

Q. Please state what you said to them at that time and to each of them.

A. I told them I wanted them to witness that sketch which I said was a sketch of an under-reamer key remover. The exact words I can't recall now.

Q. Did you tell them in any words what was attempted to be shown here?

A. Yes, sir. I explained it to them that it was a single-piece key instead of a double-piece key remover.

Q. Didn't you explain to them that it was what it purports to be, a key remover?

A. I believe I did.

Q. What did either of them say to you?

A. I don't remember the conversation, Mr.

(Testimony of Robert E. Bole.)

Blakeslee. It has been some—well, it has been four years ago. I don't recall the conversation. I explained the mechanical reamer to them.

Q. Where was it that they signed this sketch?

A. Where?

Q. Yes. A. In what place?

Q. Yes.

A. In the office of the Wilson & Willard Manufacturing Company.

Q. Were they both there at the same time?

A. Yes, sir.

Q. Did each sign in the presence of the other?

A. Yes, sir.

Q. You are sure it was not at Mr. Grigsby's shipping desk, at the shipping desk, are you?

A. Yes, sir, I am quite positive it was in the office.

Q. Was the sheet or material upon which they signed just this size when they signed it? [475—

414] A. No, sir, it was a larger sheet.

Q. Oh. And what has become of the additional surface which does not appear here?

A. I think it was thrown right in the waste basket, right there.

Q. How was it removed?

A. With scissors from the stenographer's desk.

Q. Who did it? A. I did.

Q. After they signed it?

A. Right in their presence, yes, sir.

Q. After they signed it?

A. After they signed it.

Q. Then this sheet of linen is not in the same shape

(Testimony of Robert E. Bole.)

and condition that it was when they signed it?

A. Not at that identical moment.

Q. How big was it at the time they signed it?
How much larger?

A. I couldn't say. It was a fairly good-sized sheet of paper. I had some of it in stock there in my desk, or Mr. Willard's desk, or this desk that Mr. Willard and I used together.

Q. How much of a margin was there?

A. He may be able to find the piece in the drawer back of the desk.

Q. How much of a margin was there around the field that this sketch occupied?

A. I don't recollect. I know to make a drawing like that I usually put thumb tacks in it. I see the thumb-tack marks are cut out, so it was probably much larger than that.

Q. Did you make this sketch there before Mr. Fahnestock and Mr. Grigsby?

A. I think that they were busy at something else when I was [476—415] drawing that sketch.

Q. Did you make it on the drafting board?

A. I think I did, because I am quite sure I used thumb tacks.

Q. You can't say how much larger the sheet was?

A. No, sir. I think it was just a sheet of scrap paper.

Q. Why didn't you select a large enough piece of tracing linen, if there was a roll of it there, so it would make some showing of this thing in detail, and on a scale that would better perpetuate the idea?

(Testimony of Robert E. Bole.)

A. Well, I had the drawing that I drew that from. It is a much smaller drawing. It is on a little pad.

Q. Then this is not the original of the drawing you made? A. No, sir; that is the tracing.

Q. What became of the original?

A. I suppose I destroyed it.

Q. Didn't Mr. Fahnestock and Mr. Grigsby sign the drawing, too? A. No, sir.

Q. Only signed this?

A. Only that tracing.

Q. Why did you trim it down to this size?

A. Oh, I can't just explain that. It was on a big sheet of paper, and I didn't see any necessity of carrying that paper around.

Q. You carried it around after that for a while in a bank pass-book, did you?

A. I carried it in a bank pass-book, in that book until I should judge about the middle of February, 1913.

Q. Two years or more later? A. Yes, sir.

Q. What did you do with it during the preceding two years, after its production?

A. I don't remember whether I put it with the rest of my [477—416] drawings immediately or carried it around in my pocket, but I am quite sure it was with the rest of my drawings up until the time I took it out of my trunk and placed it in the back of that bank pass-book.

Q. Can you produce that bank pass-book now?

A. Yes, sir. (Witness produces bank-book.)

Q. This sketch just about fits within the compass

(Testimony of Robert E. Bole.)

of the bank pass-book, does it not—that is, within its outline shape or area? A. As to width, yes.

Q. It fits exactly as to width?

A. Yes, sir, within one-sixteenth of an inch, possibly a little more.

Q. And it fits easily within the bank pass-book as to height, does it not?

A. Easily, yes, sir, by an inch, probably.

Q. Now, as a matter of fact, didn't you trim this sketch down at the time you first put it in that bank pass-book so it would fit within a sixteenth of an inch within that book as to width?

A. I don't recall that. I don't believe I did.

Q. Why did you trim it exactly this size at the time you did trim that down?

A. At the time that Mr. Fahnestock and Mr. Grigsby witnessed it?

Q. Yes, when you say you cut it down.

A. I can't tell you that, Mr. Blakeslee. I just trimmed it. I trimmed it right there in front of them. I had no occasion to carry that extra paper around with me.

Q. And it happened you trimmed it down so it just fit in that bank pass-book?

A. I don't say that. It is possible it was trimmed to fit that bank pass-book; I wouldn't say that it was. I don't remember that. [478—417]

Q. You didn't look around for a book that would fit into your pocket and that also this would just fit into? A. I don't know at all.

Q. As a matter of fact, you are not sure, are you,

(Testimony of Robert E. Bole.)

that you didn't trim it down until you put it in the pass-book? A. I am quite sure that I didn't.

Q. You will not say positively?

A. I will not say positively. I am quite sure I didn't.

Q. How about the preceding two years—where was this kept? Where was it in 1912?

A. I think all those years with possibly one or two exceptions it was in my trunk in my apartment.

Q. Did you show it to anybody during 1911 and 1912 after the date upon which you say you showed it to these witnesses?

A. After the date that they signed it?

Q. Yes. A. Yes, sir.

Q. To whom?

A. I showed it to a man by the name of Austin on Spring Street that is in the shoe business, I believe. I showed him a photograph of that sketch, and he remembered seeing it at that time. That was shortly after it was made, and I showed it to my father, I think it was in the spring of 1912.

Q. Is Mr. Austin available to-day?

A. I don't know. He has got a shoe store down on Spring street.

Q. Are you sure he is there now?

A. I am not sure, no sir.

Q. In what material is the purplish coloring upon this sketch? By what instrument or agency was it placed there? A. The drawing itself? [479—418]

Q. All the purplish portion or any part of the purplish portion.

(Testimony of Robert E. Bole.)

A. That is the drawing. That is a tracing. Of course, these words here (indicating) are not the tracing, or the words in here. The writing is not in the tracing, but the sketch itself.

Q. By what agency or thing was the purplish matter put on that surface?

A. By an indelible pencil.

Q. And you traced it on there over an original drawing with indelible pencil?

A. No, sir, the original drawing, if I remember right, was just a common pencil. I remember that is the kind we had out there at the shipping clerk's desk—not at the shipping clerk's desk; at the little desk that we had, and I think I made the sketch out there.

Q. But you made a tracing in indelible pencil?

A. Yes, sir.

Q. Why did you select an indelible pencil?

A. To preserve it, I think.

Q. Did you make that tracing in the shop of the Wilson & Willard Manufacturing Company?

A. Yes, sir.

Q. And you made the original drawing in that shop, did you? A. I believe I did.

Q. Where did you get the indelible pencil?

A. I don't know, Mr. Blakeslee; I don't know where I got it.

Q. What did Mr. Fahnstock and Mr. Grigsby sign that with? A. With ink.

Q. Why didn't they use the same pencil?

A. They were in the other room. When I got

(Testimony of Robert E. Bole.)

through making the tracing, I took it in the other room and had them witness it.

Q. You made this in Mr. Willard and Mr. Wilson's private office, [480—419] did you?

A. Where the drafting board is. At that time I was using the same office.

Q. Why was it that you put the part which professed to show the key and remover, up in one corner of the sketch, and occupied the main field of the surface with these two signatures?

A. I don't know how that comes. I think you will find that original drawing over there was probably on the back of a time-card. I think you will find—we had pads of those on our desk, and we often used them for sketching. I think you will find that the drawing was probably on the back of one of those time-cards, blank time-cards.

Q. That is the original drawing?

A. The original drawing, and this tracing was put over that, and it was drawn in there.

Q. What did you do with the original drawing?

A. I don't recall what was done with it. I hadn't any use for it.

Q. You didn't show this drawing to Mr. Willard, did you, or this sketch?

A. When do you mean, Mr. Blakeslee?

Q. At any time. A. At any time?

Q. At any time prior to last year.

A. I don't recall having done so. I may.

Q. You didn't show it to Mr. Wilson, did you, at any time prior to your production of it in the Inter-

(Testimony of Robert E. Bole.)

ference proceedings?

A. No, sir, I don't think I did.

Q. You are quite sure, are you, that Mr. Wilson never saw this until you offered it in evidence?

A. Quite sure.

Q. Did you ever make any drawing of the key for Mr. Wilson [481—420] prior to this time?

A. Yes, sir.

Q. When and where?

A. I made it in the shop on the floor, as I explained, when I was explaining it to him. I made a number of sketches at different times. Prior to the time that he finally agreed to try it out.

Q. And that was a sketch of just the key, was it?

A. I think so. I don't recall that. Speaking of the key or slot and keys in the reamer, we understood each other and we were familiar with all those working parts, and I probably just explained the key; but I always did contend that there should be lots of space above it.

Q. We have found that this does not fit within a sixteenth of an inch of the bank pass-book in which you testify you carried it for some months after the beginning of 1913. Was it because of the convenience of such fit that you cramped all this drawing matter and the signatures and dates upon such a small surface?

Mr. LYON.—Wait a moment. That is objected to as assuming a fact that the witness has not testified to. He has not testified that he put all those signatures on, or that he cramped them in there, or that they are cramped.

(Testimony of Robert E. Bole.)

The COURT.—Objection sustained.

Mr. BLAKESLEE.—Why did you make the drawing and provide for the showing of all the matter on this sketch, and arrange for the reception of the signatures purported to be upon this sketch, upon this small surface, which just in width fits within the bank pass-book you have produced?

Mr. LYON.—I object to that as purely argumentative. The witness has told us all about how he made it.

The COURT.—It is argumentative. [482—421]

Mr. BLAKESLEE.—What is the last question I have to ask as to size?

The COURT.—What was your question?

Mr. BLAKESLEE.—I wanted to know why he selected this particular size.

Mr. LYON.—He told you all about the circumstances.

The COURT.—Objection sustained.

Mr. BLAKESLEE.—Now, when you got back from Maricopa about the 21st of September, 1908, you say you had a talk with Mr. Willard about this order, the order which you had sent in. Please tell us in as nearly the words as you can recollect it, what was said by Mr. Willard and what was said by yourself in this connection at that time.

A. I am not positive as to the date I got back. What date did you say?

Q. I think you said about the 21st. You may make it any time.

A. Whatever date after I got back?

(Testimony of Robert E. Bole.)

Q. After you got back.

A. Mr. Willard said that Mr. Wilson would not make the key, that he had taken the matter up with Mr. Wilson at Bakersfield and Mr. Wilson would not make the key as I desired it. Do you want the full conversation?

Q. As fully as you can give it.

A. Mr. Wilson explained that he had had trouble with that style of a tee bar, a slotted tee, and that they broke just above the heavy part, the heaviest part, and that he would—at least he would call on or write the Monarch people and convince them that this would not be advisable to make this reamer in this style. He gave me to understand that Mr. Wilson would stand for no change whatsoever in the reamer.

Q. In giving you so to understand, what did he say, as nearly as you can recollect it? [483—422]

A. He said Mr. Wilson would stand for no changes whatsoever in the reamer.

Q. He said Mr. Wilson was at Bakersfield, did he?

A. Mr. Wilson was at Bakersfield; I believe it was Bakersfield. I have no way of knowing that he was in Bakersfield; I believe he was in Bakersfield. Yes, he said he would take the matter up with Mr. Wilson at Bakersfield.

Q. The Bole spear that was ordered from the same people up in Maricopa was shipped to them, was it?

A. Yes, sir.

Q. Did you at any time ever have any inquiry from Mr. Heber or Mr. Adams or the Sunset-Mon-

(Testimony of Robert E. Bole.)

arch Oil Company at Maricopa as to why had not been shipped to them the under-reamer with the single-piece key which was ordered of you in September, 1908?

A. I probably explained to them later when I saw them the reason for it. I can't recall the circumstances. I remember different times of telling Mr. Adams that I had hopes of having the reamer built eventually. I must have explained it to him.

Mr. BLAKESLEE.—We move to strike out the answer. It is all probability, and because it is not responsive, and we ask for a definite statement.

The COURT.—Objection overruled.

Mr. BLAKESLEE.—Can you remember any definite specific time at which you received any inquiry from any of those people as to why that order was not filled as given?

A. No, sir. If there was any such inquiry, it would probably come to Knapp, not to me.

Q. Did you ever know of any such word being received by the firm of Wilson & Willard Manufacturing Company? A. No, sir.

Q. You never heard that there was any such received? A. No, sir. [484—423]

Q. As a matter of fact, didn't you look through the files of the Wilson & Willard Manufacturing Company sometime after you returned from Maricopa in 1908 to see if you could find the order you had sent in, as you say, to that company, or Mr. Willard, for a reamer which was to be shipped to the Sunset-Monarch Oil Company?

(Testimony of Robert E. Bole.)

Mr. LYON.—Just a moment. I object to the question. It may be misleading. I would like to know what counsel means by “sometime after” his return. Did he mean during 1908, or sometime during subsequent years?

The COURT.—Well, he can answer it. Objection overruled.

Mr. BLAKESLEE.—You may answer at any time, Mr. Bole, if you wish.

A. I never looked through the files personally, no, sir. I don't remember whether I talked to Mr. Willard about it or whether Mr. Willard volunteered the information that he had looked through the files.

Q. To see if he could find this order?

A. To see if he could find this order.

Q. When was that?

A. I couldn't say. I think it was probably about the time that this argument, this letter of January 27th or January 17th, 1913—

Q. Sometime in 1913? A. I think so.

Q. As a matter of fact, didn't you go through the files of the Wilson & Willard Manufacturing Company and remove that letter with that order at one time? A. No, sir.

Q. What did Mr. Willard report as the result of his search?

A. He said he could not find it; he guessed he must have sent it up to Mr. Wilson at Bakersfield.

Q. Did he say he had made any search at his house for it? [485—424]

Mr. LYON.—Just a moment. We object unless

(Testimony of Robert E. Bole.)

the whole of the conversation is asked for.

The COURT.—You can bring it out on cross-examination.

Mr. LYON.—All right, if I am not limited.

The COURT.—Proceed.

A. I don't recall. He said that at that time he didn't keep—I think he said he sent all his stuff to Bakersfield.

Mr. BLAKESLEE.—Did you ever ask Mr. Wilson if he knew what had become of that order?

A. No, sir.

Q. As a matter of fact, have you ever requested Mr. Wilson or the Wilson & Willard Manufacturing Company, or anybody officially connected with that company, to look up the records of that company and attempt to find that order so that it might be introduced in this proceeding or in the interference proceedings which were previously conducted?

A. When Mr. Willard told me that he had been—I didn't make any effort after Mr. Willard informed me that it was not there.

Mr. BLAKESLEE.—I don't think that is responsive, your Honor. I want a definite answer yes or no.

The COURT.—What was the question?

(The question was read as above recorded.)

A. I believe that I did ask Mr. Willard.

Q. When?

A. I don't know when it was. I have forgotten the time.

Q. Did you ever ask anybody else?

(Testimony of Robert E. Bole.)

A. He said he didn't recall the exact shape of the key, or something like that. I said it was a one-piece key, and he remembered that, but he said he could not recall just the exact shape of it. And he says, "Well, look up the order and find out."

The COURT.—When was this? [486—425]

A. This was, I think, the first part of 1913 or latter part of 1912.

The COURT.—That was before this litigation arose. How did you happen to ask him about it?

A. Well, the reamer had been developed until such a time as it was quite a good tool, and it made this reamer a success, and I believed that I was entitled to a patent on it.

Mr. BLAKESLEE.—If you thought so, why didn't you apply for a patent then and there?

A. Mr. Blakeslee, I spoke to you about different things along that line. You were my attorney, and you would not take them up—anything that was connected with Wilson & Willard Manufacturing Company.

Q. I will admit that I have, prior to the last two years, filed several applications for patents for you, although I severed my relations with you before the interference controversy.

A. You know at that time that I was not overly financially strong.

Q. However, nothing was ever stated as to your claim to any such key. Now, I ask you—

Mr. LYON.—Now, if you want to testify in this case, we would like to have you sworn. Otherwise

(Testimony of Robert E. Bole.)

we will ask that the statement be stricken from the record.

The COURT.—It may be stricken out.

Mr. BLAKESLEE.—I am willing to be sworn if counsel wants to cross-examine me. Now, please answer the question why it was that you did not apply for a patent on this key prior to the commencement of this controversy.

A. Well, that was the reason.

Q. Prior to 1913?

A. I had, I think it was, four or five patents pending in [487—426] your office at that time. I remember one patent, one application, that Mr. Knapp brought in after I had brought mine in to you and you would not accept Mr. Knapp's, and made it clear to me that you would not do anything that would interfere with one member of the firm in connection with the other. I had no other attorney at the time, and I had an interest in the pump business. I had my pump business to take care of. Money was tight, and I think there was four or five stores—four stores, probably—buying stuff by the carload, and I was pretty busy.

Mr. BLAKESLEE.—You never did submit any reamer matter to me to patent, did you?

A. I don't believe I did.

Q. Now, you—

A. I don't believe I submitted anything to you that would interfere with anything that was in connection with Wilson & Willard Manufacturing Company's shop at that time.

(Testimony of Robert E. Bole.)

Q. But you did file other patent applications, did you, subsequent to the beginning—subsequent to the time that you asked Mr. Willard to look up the order? A. Afterwards?

Q. Yes.

A. I don't believe I did, no, sir. I don't remember the dates of filing these applications.

Q. But you did subsequent to the time that you made this sketch? A. Yes, sir.

Q. Now, you have testified that you sent in—that you considered the order which had been sent in from Maricopa for the Sunset-Monarch Oil Company for a reamer to include the single-piece key, to be your record, as to your having worked out such a thing at that time. When did you first attempt to determine whether such record was perpetuated or on file at the place [488—427] of business of the Wilson & Willard Manufacturing Company?

A. I don't recall that. The first time was when I talked to Mr. Willard about it.

Q. That would be some five years after the—some four years and a half after the time you sent in the order? A. About that, I should judge.

Q. And since the beginning of the interference controversy, you have made no effort, have you, to determine whether there was on file among the records of the Wilson & Willard Manufacturing Company such order showing such key device?

A. I considered it useless.

Mr. LYON.—I will ask counsel for Wilson if he will not concede, in order to save the time of the

(Testimony of Robert E. Bole.)

Court, that such demand was made in the interference proceeding, and both E. C. Wilson and W. W. Wilson cross-examined as to their inability to produce such order.

Mr. BLAKESLEE.—We will concede that a demand was made formally by counsel, and that we, in compliance, attempted to find any such thing, and the testimony shows it could not be found. That was after, of course, the taking of testimony commenced.

The COURT.—You say after the taking of testimony commenced?

Mr. BLAKESLEE.—After it had commenced, yes, sir—not before.

Mr. LYON.—The burden of proof is on the other side during the taking of their testimony.

Mr. BLAKESLEE.—Did you make, and if so, did you keep, any copy of the letter which you say you sent in to Mr. Willard or the Wilson & Willard Manufacturing Company embodying this order for the single-piece key for the Sunset-Monarch Oil Company in 1908?

A. No, sir, I didn't make any copy of it.

Q. Then you relied, did you, entirely upon Wilson & Willard [489—428] Manufacturing Company, which was making under-reamers patented by Mr. Wilson, to keep your records with respect to what you contended was an invention in under-reamers—is that correct? A. Yes, sir.

Q. Did you make or keep any copy at all of any of those sketches you sent in for that order?

A. No, sir, I don't believe that I did.

(Testimony of Robert E. Bole.)

Q. Why was it you held up the manufacture of the spear until you got back, and ordered Mr. Willard, as you say, to go right ahead with the manufacture of the reamer for the Sunset-Monarch people?

A. I don't believe that I did hold up the order for the spear. The order was put on the book, I think, September 19. It was put on September 19th, and the two of them were shipped on the 30th. So it could not have been held off. That would make the spear complete, a brand new ten-inch spear and a new 9 $\frac{5}{8}$ reamer, in five days, so that could not have been held off at all.

Q. The order for the spear was made up the date that you returned to Los Angeles, wasn't it?

Mr. LYON.—Now, wait a moment. I object to that on the ground that there is no foundation laid, the witness *not shown* that he knows personally about the making up of the order. That is, you mean the shop order, I suppose?

Mr. BLAKESLEE.—Question withdrawn.

Q. As a matter of fact, was anything done on the spear until after you returned?

A. I don't recall that.

Q. Anything about it?

A. I don't recall it.

Q. But in spite of the new features of the reamer, your instructions to Mr. Willard were to go right ahead with that, was that it? [490—429]

A. To go ahead and finish up the body as per the instructions and get it ready to ship immediately if not finished.

(Testimony of Robert E. Bole.)

The COURT.—We will take a recess until two o'clock.

(Recess taken until 2 o'clock P. M.) [491—430]

Friday, March 26, 1915, 2 o'clock P. M.

ROBERT E. BOLE, recalled.

Cross-examination resumed.

(By Mr. BLAKESLEE.)

Q. In the interference proceedings to which we referred before, you testified as follows, did you not:

“Q. 36. Have you such letter? A. No, sir. Q. 37. Please state what said letter contained with reference to this order for this 9 5/8 inch under-reamer for said Sunset-Monarch Oil Company. A. I ordered this reamer to be made up and shipped immediately and a description of the reamer was right on the letter. I described it as I went along and made sketches as I desired it. The spear I notified them that as soon as I returned to Los Angeles I would have forgings made to have it made up at once, but to ship the reamer immediately—to make up and ship the reamer immediately.” You so testified? A. Yes, sir.

Q. That testimony was to the best of your knowledge at that time? A. Yes, sir.

Q. Then is it true that you wished the reamer pushed ahead and the spear held up till you got back to Los Angeles? A. Yes, sir.

Q. And there was nothing special about this spear, was there?

A. It was all special. They never made any like it before.

(Testimony of Robert E. Bole.)

Q. Hadn't there been such spears made before?

A. Not in that shop, no, sir.

Q. Hadn't they been made before? A. Yes, sir.

[492—431]

Q. A great many years before?

A. No, sir; not a great many years before; they had been made in 1906 and seven.

Q. At your father's shop? A. No, sir.

Q. Where were they made?

A. At the Bunting Iron Works, Coalinga, and the California Oil Fields Limited shops at Coalinga.

Q. That type of spear was known in the fields in California, wasn't it?

A. Only as the "Bole spear"; yes, sir. It was not extensively known, because we never built a great many.

Q. It was known like the Austrian under-reamers and various other spears—Mack spears and other things, wasn't it?

Mr. LYON.—Objected to as irrelevant and immaterial.

The COURT.—I will sustain the objection.

Q. (By Mr. BLAKESLEE.) That spear was known in the California fields, was it not?

Mr. LYON.—We object to that as immaterial. We are not trying a patent case on the spears.

The COURT.—I will sustain the objection.

Q. (By Mr. BLAKESLEE.) When you were testifying in that interference you did not tell us anything about there being an original drawing of which this sketch is a tracing, did you?

(Testimony of Robert E. Bole.)

Mr. LYON.—We object to that as not the proper method of impeachment by testimony. Let him show the witness his testimony.

The COURT.—I can't hear you.

Mr. LYON.—We object to that as not proper cross-examination. The witness should be confronted with his testimony in the interference, and he should be shown his testimony.

Mr. BLAKESLEE.—I am asking a question of fact, whether he did testify about that at all.

The COURT.—I don't know how the rule would be about that. [493—432] Of course, a man is entitled to be confronted with his testimony—

Mr. BLAKESLEE.—There is no objection to that.

Mr. LYON.—Do you want to prove that he did not?

Mr. BLAKESLEE.—Yes.

Mr. LYON.—Then offer the whole of his deposition.

The COURT.—Are you going to offer the whole deposition?

Mr. BLAKESLEE.—Yes, sir.

The COURT.—That will settle it, of itself, then.

Q. (By Mr. BLAKESLEE.) I want to ask him why he didn't.

A. You don't want me to read all this?

Q. Do you know whether you so testified as to that original drawing?

A. Do you mean the drawing that accompanied the original drawing for the key?

Q. The drawing of which the sketch of January

(Testimony of Robert E. Bole.)

27, 1911, is supposed to be a tracing.

A. That little sketch?

Q. Yes.

A. No; I don't believe I made mention of that.

Q. Why didn't you tell us about it in that case?

A. I don't believe I was asked.

Q. You testified that you were hardly in financial condition to apply for letters patent in 1911 and twelve. Were you better off in 1913 and fourteen?

Mr. LYON.—Objected to as immaterial. It is conceded that he did not pay for the cost of making this application for the patent in suit.

Mr. BLAKESLEE.—Who did?

Mr. LYON.—That is part of the consideration for the assignment of a half interest to Mr. Double.

The COURT.—Then the objection will be sustained, with that concession. [494—433]

Q. (By Mr. BLAKESLEE.) You have not told us yet when you first worked out this single-piece key device. When was that?

A. It was during the week that I was away from the shops of the Wilson & Willard Manufacturing Company in September, 1908, and it was while I was at Maricopa, after I had tried to secure the order from Mr. Heber. I couldn't tell you the exact date.

Q. Did that conception come to you at the time you were talking to Mr. Heber or before?

A. I think that it came to me right at that time, if I recollect right. I saw an opportunity to overcome the difficulty. Whether I took it up with Mr. Heber at that identical moment or not, I don't know.

(Testimony of Robert E. Bole.)

Those things usually take a little time to work them out.

Q. And then you immediately made those sketches, did you? A. I couldn't say as to that.

Q. Did you make any request to Mr. Heber or Mr. Adams to witness any sketch for you at that time or to make any notation that you had disclosed this invention to them? A. No, sir.

Q. At that time you were quite sure that you told Mr. Heber that the practical way to extract this key was to lift it up by a sharp-pointed instrument or drift applied beneath one end of the key, and then to apply force to the other end of the key. Is that correct?

A. Yes, sir. I believe I used the word "drift."

Q. (By the COURT.) To whom did you tell that?

A. Mr. Heber, superintendent of the Sunset-Monarch Oil Company.

Q. When did you tell him that?

A. In September, 1908, when he gave me the order for the reamer of this size.

Q. (By Mr. BLAKESLEE.) And the action of the lever which you say you got up was to be a lifting action and a prying action, was it, for removing the key? [495—434]

A. You mean that the lever that I have on the sketch that is witnessed?

Q. Yes.

A. Yes; if it was to be used at all it was to be used to pry it up and outwardly at the same time.

Q. You never tried that, did you?

(Testimony of Robert E. Bole.)

A. No, sir, I never tried it; not till to-day.

Mr. BLAKESLEE.—In connection with the testimony of this witness we offer in evidence the key which he inserted in “Defendants’ Exhibit 1,” and the lever with which he attempted to extract the key, as “Defendants’ Exhibits 11 and 12.”

Mr. LYON.—Objected to as incompetent, no foundation laid, if it is attempted by that to prove anything other than the particular device, or prove any connection of it with any device of Mr. Bole’s. There is no identification and no foundation laid.

Mr. BLAKESLEE.—We offer it for whatever it is worth in connection with the testimony and the sketch.

The COURT.—The Supreme Court of California criticised very severely, a Judge admitting testimony for what it is worth. It ought to be material or not material, one or the other.

Mr. BLAKESLEE.—We contend it is material. I can state what I think it is worth. In other words, we want to show and we shall show, we contend, before we are through with this case, that that is all this complainant did in and about this invention.

The COURT.—I think it is material for the purpose of illustrating the witness’ testimony.

Mr. BLAKESLEE.—That is what I mean.

Mr. LYON.—There is no foundation laid, of course, that it was built according to his idea.

Q. (By Mr. BLAKESLEE.) In 1908 you considered the method of applying the drift beneath the key to raise one end of it and then drive the key

(Testimony of Robert E. Bole.)

from the other end to remove it, as being the simple, practical way, did you? [496—435]

A. Yes, sir.

Q. How many sketches did you make for Mr. Heber in 1908?

A. I made one that I remember of.

Q. How many for Mr. Adams?

A. I believe I just made the one.

Q. Can you describe in your own words the key that you say you drew in chalk for Mr. Wilson when you were discussing that matter with him?

A. The key that I drew for Mr. Wilson on the floor was a duplicate of this key here.

Q. Can you describe it to me, in your own words?

A. What I described to Mr. Wilson at that time?

Q. What you drew in chalk on the floor.

A. I just drew a sketch of this key.

Q. That is the best you can tell us as to what you drew?

A. No. I told him how to put it in and take it out, and he said that he didn't believe you could get it out.

Q. That is the best you can tell me in words as to what you drew on the floor?

A. He said the construction of the tee bar was weak. We went all over it—we discussed it back and forth. He told me what the weak faults of the reamer would be, and I told him what the strong points would be. He pointed out the weak points, that is, the breaking of the tee bar and the inability to get the key out of the reamer. I pointed out the

(Testimony of Robert E. Bole.)

strong points of the reamer in telling him that you could deepen the key and make it stronger.

Mr. BLAKESLEE.—We ask that the answer be stricken out as not responsive.

The COURT.—Strike it out. I think the question is foolish.

Mr. BLAKESLEE.—Then I will withdraw the question.

Q. Will you please state in your own words what it was that you drew with chalk on the floor for Mr. Wilson, to illustrate the key? [497—436]

The COURT.—I will have him draw a diagram of it and let me see the diagram. To describe a thing by words is a difficult thing for anybody to do.

A. (Witness draws diagram.) A chalk drawing would not be nearly as plain as that.

Mr. BLAKESLEE.—The witness has seen these keys a great many times, and I wanted to see—

The COURT.—Your question simply asked him if he had the ability mentally to describe that thing. I don't think there is anything in that sort of an interrogation. You can get at it by letting him put his idea on paper. It might be difficult for anybody to describe.

Mr. BLAKESLEE.—He is a machinist, your Honor.

The WITNESS.—Practical.

Mr. LYON.—We would like to offer in evidence the sketch that was made.

The COURT.—You can do that when it comes to your side.

(Testimony of Robert E. Bole.)

Mr. LYON.—I ask that the sketch be identified.

Q. (By Mr. BLAKESLEE.) At the time you testified Mr. Wilson said he didn't know how to get the key out, what did you tell him could be done, if anything?

Mr. LYON.—I ask if the counsel means at the time of that conversation, or at the time he testified?

Mr. BLAKESLEE.—As he testified. I am not fixing the time.

The COURT.—Overruled.

A. I didn't say Mr. Wilson said he didn't know how to get the key out. He said he didn't believe the key could be gotten out.

Q. (By Mr. BLAKESLEE.) Then what did you say to him at that time?

A. I said you could get it out by simply driving a shift under it and raising one end and driving it out from the other side.

Q. Was that prior to the time that you made this sketch of this lever, which sketch you say was witnessed by Fahnestock and [498—437] Grigsby?

A. We had a number of discussions, Mr. Wilson and I, on that thing; and Mr. Wilson insisted that the only way the thing could be gotten out was to put a lever of some sort under and pry it out. And I told him that I could devise a lever like that. In order to get to make this tool, I had to agree with him some way. He wouldn't make it unless I did agree with him. And this was the tool that I got up and had witnessed,—the one that I drew up and had witnessed.

(Testimony of Robert E. Bole.)

Q. Then it was the lever that Mr. Wilson suggested, was it, that you drew up and witnessed?

A. No, sir; Mr. Wilson said some kind of a lever would have to be devised. He said that was the only way he could see to get it out.

Q. Then was this conversation prior to the making of that sketch? You have not answered as to that.

A. Yes, sir; it was prior to the time of making this sketch; yes, sir.

Q. And it was Mr. Wilson who suggested that some kind of a lever would have to be devised?

A. He believed that the only way—I don't know whether suggested that or not. He believed that the only way was to pry it up—pry it up and pull it out.

Q. That is what the lever was intended to do, wasn't it?

A. Yes, sir; that was what that was intended to do. I told him I could devise a lever that could do it.

Q. You have said that Mr. Wilson said there would be an objection to the use of such a key, in that mud or detritus would get in above the key and jam it so that it could not be pried out. Isn't the same thing possible with a key as used in the Wilson reamer? A. The same thing possible now?

Q. Yes. [499—438]

A. I don't say that, in the first place, Mr. Blakeslee, I said that the mud would get in and interfere with the working parts of the reamer.

Q. Isn't there the same possibility of mud so get-

(Testimony of Robert E. Bole.)

ting in in the reamer as made with the key at the present time like this exhibit 1?

A. There is now. There is now; yes, sir.

Q. (By the COURT.) When did you tell him that statement, that the mud would get in? When was that conversation?

A. Mr. Wilson contended that the mud would get in.

Q. When was that?

A. The first time I talked to Mr. Wilson, when he first came down from Bakersfield. The first time I talked this over with him at all.

Q. Was that away back in 1908?

A. Yes, sir; the latter part of 1908 or the spring of 1909. The first opportunity I had to talk to him. I don't recall exactly the date.

Q. (By Mr. BLAKESLEE.) Please tell us how many of these talks you had with Mr. E. C. Wilson prior to January 26, 1911, and approximately, when you had each of said talks.

A. Mr. Wilson testified we talked this thing over hundreds of times, but I won't say that.

Q. The question relates to the period prior to January 26, 1911.

A. We talked it over a great many times. I can't tell you, Mr. Blakeslee, how many times.

Q. Can you fix the approximate times of such talks? A. No, sir; I could not.

Q. Can you state whether you talked it over three times or fifty?

A. It was not fifty and it was more than three.

(Testimony of Robert E. Bole.)

Q. Were any persons present at such conversations besides you and Mr. Wilson?

A. I don't remember. Mr. Willard may have been at one or two of them.

Q. You are not sure whether Mr. Harry Naphas was there or not, are you?

A. When was this? Prior to what time?

Q. Prior to January 26, 1911.

A. No, sir; Mr. Naphas was not there at that time.

Q. Can you fix any conversation during that period of time at which anybody was present but you and Mr. Wilson?

A. No, sir; I can't fix any conversation—the time of any conversation.

Q. Is it your best knowledge that nobody else was present at these conversations or any of them?

A. I think Mr. Willard was at a couple of them.

Q. How many times? A. I couldn't say.

Q. Are you sure he was present at any such times?

A. I kind of think he was. I kind of think the conversation that Mr. Wilcox referred to was the one when Mr. Willard was there. But the conversation occurred before January 27, 1911.

Q. Were you present at that conversation?

A. If there was a conversation of that sort, I certainly was present. I don't say there was a conversation, but it seems to me that I had conversations before January 27, 1911, with Mr. Wilson, at which Mr. Willard was present. I won't say positively.

Q. You heard Mr. Wilson's testimony in this case, did you not? A. Yes, sir.

(Testimony of Robert E. Bole.)

Q. Are you now referring to the conversation which he referred to which is supposed to have taken place in the rear of the shop?

A. No, sir; there was no such conversation in the rear of that shop. [501—440]

Q. Aside from the fact of whether there was a conference called, or whether a number of people put their heads together, do you not remember such a conversation in which you suggested to Mr. Wilson that the key could be pried out?

A. Not after January. Not after that drawing was made. If there was such a conversation it was before that drawing was made; before January 27. If there was such a conversation.

Q. And if there was such a conversation before the drawing was made, did Mr. Wilson also at such conversation show you a sketch of the key?

A. He did not show me any sketch of a key. He never showed me any sketch of a key. He may have had a sketch in his hand that I saw.

Q. Did he have a sketch in his hand at that time?

A. I don't recall.

Q. Will you say that he did not have at such time?

A. No; I won't.

Q. (By the COURT.) Do you remember being with Mr. Wilson at the time when Mr. Wilcox was near you?

A. No; I don't remember that, your Honor. I hate to doubt Mr. Wilcox's word, that is all. I don't remember any such conversation.

Q. You don't remember of saying to Mr. Wilson

(Testimony of Robert E. Bole.)

when Mr. Wilcox could hear you, "pry it out," or words to that effect? A. No, sir.

Q. You don't remember that at all? A. No.

Q. (By Mr. BLAKESLEE.) You have referred to some kind of a reamer of the two-plug type. What was that?

A. The block and screw type. Do you want a description of that?

Q. Well, it is what we have called in these proceedings the block and screw type? [502—441]

A. Yes, sir; the block and screw type reamer.

Q. Only at times plugs and pins were used in place of screws?

A. It is the same thing, but they call them plugs.

Q. Now, you say this making up of the key was done through the pump department. By that you mean the Bole Pump Company's business, do you?

A. I think the order went through the pump department, but I am not positive about that. In other words, I would make up the order and it would go to the office to be typewritten and come out through the shop in the regular way. Then it would go to the blacksmith's shop for the forging, from there to the shaper, or whoever worked on it.

Q. Did you make up that order?

A. I say that I think I did.

Q. Have you looked to see if you can find that order?

A. I have no records of any kind from the Wilson & Willard Manufacturing Company. They were all left there.

(Testimony of Robert E. Bole.)

Q. Didn't you keep any records of the matters that went through your own pump business there?

A. They were put on a file right on the desk that was used by the men of the pump department, and they would get used up for scrap paper. They were not kept. That is, the duplicates were not kept.

Q. Please mention each and every person who had anything to do with making up this key which you say you ordered through the pump department for insertion in the Wilson reamer.

A. Well, the small hammer would make the key—the steam hammer crew.

Q. Who were in that crew?

A. Fred Rydgren and Charlie Berg. From there it was taken in to the shaper and the shaper work done on it.

Q. Who did that work?

A. I think a man by the name of Wills did that.

[503—442]

Q. Who did the next work on it?

A. I helped file and fit it.

Q. Where did you file and fit it? A. At the vise.

Q. In what part of the shop?

A. In the west end of the shop where the vises are on the benches.

Q. Then who first put it in the reamer?

A. I was the first man that put it in the reamer. Mr. Houriet attempted to put it in the reamer.

Q. That was reamer 120? A. I don't know.

Q. And what was done with that reamer with the key in it?

(Testimony of Robert E. Bole.)

A. It stood around there for exhibition purposes.

Q. For how long?

A. I couldn't say that.

Q. Do you remember any other reamer with a single-piece key that was made before that?

A. I don't know which was the first one made.

Q. Please answer the question.

A. Before the first one—the one that I refer to?

Q. The one you are discussing.

A. I am talking about the first one. There was none made before the first one; no, sir.

Q. I presume that the first was the first, but was that the first you know of.

A. The one I am speaking of was the first.

Q. To your knowledge.

A. Yes, sir; it was the first.

Q. And you yourself drove that first key into place in the reamer?

A. Yes, sir. The reason I am positive about the first reamer [504—443] is, it is my opinion that the work started on that reamer before the 3d of February, and that don't seem to me to be the first reamer,—this reamer 120.

Q. How long before?

A. I should say about the middle of January.

Q. Away before you made your sketch of January 26, 1911?

A. Not the middle of January. What is the date of that No. 6904?

Q. February 3, 1911.

A. Well, it runs in my head that it took about a

(Testimony of Robert E. Bole.)

month to make it, and I think it was finished about the 15th of February.

Q. Then that would mean a commencement on it about the 15th of January, would it?

A. Well, I couldn't say positively.

Q. Well, such reckoning would bring it there. Now, that was twelve days before you made the sketch of a January 27, 1911. Is that correct?

A. I should judge I am wrong in that. I said it ran in my head that it took about that time.

Q. But you can't state from your own knowledge that you have—

A. No, I have no records at all of it.

Q. Then you have no foundation for the statement that February 3, 1911, was too early a date for the commencement of the first reamer with the single-piece key. Is that correct? A. That is correct.

Q. Who were present when you drove the key in?

A. Mr. Naphas and Mr. — No, I don't know that Mr. Naphas was present. Mr. Houriet was present.

Q. That Mr. Houriet is the same party who has testified?

A. Yes. And Mr. Wilcox was around there; there may have been others.

Q. Was Wilcox there and saw you do it?

A. I don't know whether he just saw me drive that key in or not. [505—444] He was there. Mr. Houriet, I am positive, saw me drive it in, because I took the key away from Mr. Houriet and tried to drive it in myself.

Q. And Mr. Wilson saw you do that?

(Testimony of Robert E. Bole.)

A. No, sir.

Q. Have you mentioned each and every person who had anything to do with the making up of the first key which you say you supervised, and also every person who saw it up to the time of its first introduction within the reamer?

A. Mr. Houriet worked on it, I am pretty sure.

Q. No other names to mention?

A. Myself and Mr. Berg and Mr. Rydgren, I think were about all; but I am not sure about that.

Q. Now, yesterday you testified that E. C. Wilson, Charles E. Wilcox and Al W. Houriet were all present when you drove in this first key. Is that your present testimony?

Mr. LYON.—I object to that; show him the transcript.

The COURT.—Show him the transcript of the evidence, if it is written out.

Mr. BLAKESLEE.—He testified this morning. It was not yesterday.

A. I don't think that I testified that Mr. Wilson was there when the key was driven in.

Q. And if you did, you wish to correct it, do you?

A. I didn't do it. I am positive. But if I did, I wish to correct it now.

Q. Then this lighter key or weaker key which was made for this first single-piece key reamer, was put aside after it was first put in and taken out, and a heavier key substituted. Is that correct?

A. I don't know. At the time it was conceded that this key was too weak, and I presume that the

(Testimony of Robert E. Bole.)

heavier key was put in before it went out. I am quite sure they wouldn't send that key out [506—445]

Q. Do you know anything about the history of that subsequent key after you drove it in?

A. No, sir, only that it was used there for demonstrating purposes for quite a long time.

Q. When and where was it that you made this explanation to Mr. Hubbard, your brother-in-law, that you intended to do certain things for holding the lower end of the spring in the Wilson under-reamer?

A. Well, it was in Los Angeles here.

Q. When?

A. Well, it was about the fore part of October, 1908. It may have been on the train, I think, coming in. I met him out here a ways at some little station. If I remember correctly, I think I went out and got on the train with him, and I believe I mentioned the thing among one of the very first things I said to him.

Q. Will you state the number of sketches that were embodied in that letter order which you sent in from Mariposa in September, 1908, as you say, for the Wilson reamer.

A. My recollection is that there were two sketches.

Q. Now, please tell us just what you said to Mr. Fahnestock and Mr. Grigsby—

A. That is, two sketches on the letter.

Q. —as you say, on January 27, 1911, in showing them this sketch of that date.

A. The exact words?

(Testimony of Robert E. Bole.)

Q. As closely as you can.

A. I will have to go into a description of the reamer again, because I described it to them in my own words as near as I could.

Q. State what you told them in substance, if you cannot in words, please.

A. Well, I said this one-piece key is to be driven in through the side of the reamer body through the slot. The driving of it in [507—446] will raise the spring and as soon as the key snaps in place it will be held in its position by the tension of the spring above; and that the cutters are to be supported by means of a spring-actuated rod.

Q. Now, this morning you said that you thought Mr. Naphas was present.

Mr. LYON.—Is that all the conversation? Do you want the rest of the conversation? You interrupted the witness.

Mr. BLAKESLEE.—I thought he was through.

A. That is practically the conversation. I asked them to witness the sketch.

Q. When did you show this sketch to Austin, the shoe man?

A. About the 1st of February, 1911.

Q. Did you ask him at that time to witness it or make any memorandum of it? A. No, sir.

Q. You stated this morning that Mr. Naphas was possibly present when you put in the first key. Is that your present recollection?

A. Mr. Naphas was present—Not when I put in the key, no, sir; when I took the key out. The key

(Testimony of Robert E. Bole.)

was already in when he saw it.

Q. He is in the city, is he? A. Yes, sir.

Q. Do you know where he is?

A. In the courtroom.

Q. Last fall on the 7th of October you called at the house of Mr. W. H. Fahnestock in the evening, did you not?

Mr. LYON.—We object to that as immaterial.

The COURT.—Objection overruled. I presume it is leading up to a conversation.

Mr. BLAKESLEE.—Yes, sir.

A. I don't recall the date. I called, I think it was in October—last fall.. [508—447]

Q. You only called there once last year, didn't you? A. Yes, sir.

Q. And not since then? A. No, sir; not since.

Q. Did you have a conversation with Mr. Fahnestock at that time? A. Yes, sir.

Q. Now, at the time of this visit at Mr. Fahnestock's residence on October 7, 1913, in the evening, namely, at 6647 Selma Avenue, City of Los Angeles, California, didn't you say to Mr. Fahnestock: "I don't remember of your explaining anything about it" in answer to his question: "When I signed the sketch you didn't explain anything about it, did you?" Did you make such a statement under those circumstances?

Mr. LYON.—The question is objectionable as being involved. I can't understand who is supposed to be saying anything.

The COURT.—It does seem to me that the state-

(Testimony of Robert E. Bole.)

ment is involved. You seem to have a parenthetical phrase which is ambiguous and uncertain. Can't you ask it differently?

Mr. BLAKESLEE.—Perhaps I should state the time and place.

The COURT.—You need not state the time and place. He is a party to the litigation.

Q. (By Mr. BLAKESLEE.) At the time of this visit to Mr. Fahnestock last October, did Mr. Fahnestock not ask you whether when he signed the sketch you did not explain anything about it, and did you not in response to that question say that you did not remember explaining anything about it, and that you just asked Fahnestock to witness it?

A. No, sir; I did not. I can tell you what I did say.

The COURT.—You are inquiring as to this exhibit that has Fahnestock's name on it?

Mr. BLAKESLEE.—Yes, sir. We are laying a foundation to impeach the witness. [509—448]

Q. Now, you took pains to make the sketch—that of January 27, 1911,—you say, to show how a lever could be applied under one end of the single-piece key and how the key could be pried up. Did you ever make any sketch prior to that time to illustrate the method by which you proposed to drive a drift or a pointed instrument under one end of the key and lift it up?

A. Not unless in illustrating it to Mr. Adams or Mr. Hubbard. I may have done that. The key was the principal thing, and that is the principal thing that I remember.

(Testimony of Robert E. Bole.)

Q. Now, did you make any such sketch at that time? A. Of a drift?

Q. Yes; showing how a drift could be applied.

A. I can't say that I did and I can't say that I didn't.

Q. Did you give any instructions to Mr. Willard in the order which you say you sent him to make up anything in the nature of such drift to be driven under the key and to be shipped with that reamer?

A. No, sir. That sketch that I reproduced here is as near as I can remember what I sent to Mr. Willard in that letter.

Q. Did you suggest any method or means of getting the key out?

A. I told him it could be very easily gotten out by driving a drift under one end.

The COURT.—I don't hear you.

A. I told him that it could be very easily removed by driving a drift under one end of the key, raising that end up, and driving it out on the other side.

Q. When was it that you told him that?

A. That was in my letter to the Wilson & Willard Manufacturing Company, care of Mr. Willard, on the 9th of September, 1908.

Q. (By Mr. BLAKESLEE.) But you made no sketch to show the application of this drift? [510—449]

A. I don't remember it in that letter.

Q. And yet that you considered a much better way, did you not, to get the key out than by using the lever in the sketch of January 27, 1911?

(Testimony of Robert E. Bole.)

A. Yes, sir.

Mr. BLAKESLEE.—We wish to offer in evidence and have copied into the record the deposition given by the witness in this Interference No. 37126 in the opening case of Bole, and we ask that such deposition be copied into the record from the typewritten transcript furnished by the reporter in that case, and particularly for the purpose of impeachment. And, of course, this is subject to correction by comparison with the notes of the reporter if such corrections are found to be necessary.

Mr. LYON.—We have no objection except this: We insist that only the questions and answers be copied in and not the argument of counsel appearing in said deposition.

Mr. BLAKESLEE.—That is stipulated.

The COURT.—How do you expect the Court to consider this?

Mr. LYON.—We will have to read it in the argument. That is all.

The COURT.—Such parts as you desire the Court to consider?

Mr. LYON.—Yes, sir.

Mr. BLAKESLEE.—That concludes the cross-examination.

(The deposition last referred to, given by the witness in Interference No. 37126 in the opening case of Bole, and offered in evidence, is as follows.) [511—450]

[Deposition of Robert E. Bole, for Plaintiffs.]

ROBERT E. BOLE, called as a witness on behalf of the party Bole, being first duly sworn according to law, testifies as follows:

Direct Examination.

(By Mr. LYON.)

Q. 1. You are the Robert E. Bole to whom letters patent of the United States No. 1,080,135 were on December 2, 1913, granted and issued, on an application filed in the United States Patent Office February 19, 1913, serial number 749,343, are you?

A. Yes.

Q. 2. When did you conceive the invention illustrated, described and claimed in said patent?

A. In the month of September, 1908, somewhere between the 12th day of the month and the 20th.

Q. 3. Where were you at the time?

A. At Maricopa.

Q. 4. Maricopa, California?

A. Kern County, California.

Q. 5. What were you doing at that time?

A. I was employed by the Sunset-Monarch Oil Company to take charge of their shop, and I went there for that purpose.

Q. 6. Who employed you for that purpose at that time?

A. Mr. R. L. Heber, who, I believe, was the general foreman.

Q. 7. Prior to going to the Sunset-Monarch shop at that time, with what business had you been connected?

(Deposition of Robert E. Bole.)

A. I was connected as a copartner of Mr. Willard in the Bole Pump Company, and we ran that in connection with the Wilson & Willard Manufacturing Company of Los Angeles.

Q. 8. Please state the circumstances under which you conceived the said invention.

A. As I said before, I went to Maricopa to take charge of [512—451] this shop, and Mr. Willard of the Wilson & Willard Manufacturing Company asked me to see if I could make any sales of tools or supplies that they had in stock, or would make, while I was there. I had not expected to stay at the Monarch shop except to get the shop in running order; and as soon as I completed that job I figured on coming back to Los Angeles. When I went there the general manager had sent a man down from San Francisco for the same job, and so Mr. Heber, the superintendent, agreed to pay my expenses and give me an order for some tools and call it square, and I would go back to Los Angeles. So he gave me an order for a 10-inch Bole spear, and I asked him if I he didn't want any under-reamers. He said he needed an under-reamer at that time—a $9\frac{5}{8}$ inch reamer—but that he had had trouble with the Wilson under-reamer and didn't want to order any more. I asked what the trouble was and he said they had trouble with the pins; that the pins would freeze and they would have to drill them out. He said he didn't want to use the reamer at all under the circumstances. I said I thought we could overcome that, and that I could devise a reamer which would over-

(Deposition of Robert E. Bole.)

come that trouble, and I did devise and show him at that time this reamer on which I took out a patent—the key reamer.

Q. 9. You say that they, the Sunset-Monarch, had had some trouble with the pins freezing. What pins?

A. At that time the Wilson & Willard Manufacturing Company were making an under-reamer which they called their block and screw type. That was one of these reamers. The pins were screwed in the sides of the reamer into a block and this block held the spring in position when the cutters were suspended on the tee bar, and the upper end of the tee bar suspended on the spring. It was this style of reamer that gave them the trouble.

Q. 10. How did you explain to Mr. Heber this single-piece key that you referred to? [513—452]

A. I made a sketch of a reamer with a key and the tee bar and cutters in place.

Q. 11. And what kind of a key did you sketch for Mr. Heber at that time?

A. It was a 1-piece key loosely mounted in the reamer body, and that was my object, to have it very loosely mounted so it could not possibly freeze. It was loosely mounted in the body, and was held in place from the side motion by the tension of the spring above. At its lower end it had a projection which fitted into the bore of the reamer below.

Q. 12. Explain a little more fully the form and shape of such projection which fitted into the bore below, as it was explained to Mr. Heber at that time.

(Deposition of Robert E. Bole.)

A. The projection in the length was just slightly smaller than the bore of the reamer; that is, the lower projection. The width of the key itself, or the length I should say, would be practically the size of the outside diameter of the body of the reamer.

Q. 13. And what was the shape of this projection that fitted into the bore?

A. Well, it was a square projection. I presume you would call it that. It projected downwardly.

Q. 14. Was there anyone else present at any portion of this conversation between Mr. Heber and yourself?

A. There was a Mr. Adams—Gus Adams—at the shop. I believe he was there at the time. He was very emphatic in his objections to the old style reamer, and I explained this new reamer that I would send up, and it seemed to thoroughly satisfy him. Really, at that time he was just a machinist, and the reason he had such a kick was because he had all the work to do.

Q. 15. Please explain in full this under-reamer you so proposed to Mr. Adams and Mr. Heber to have made and sent to the [514—453] Sunset-Monarch Company at that time.

A. The body of the reamer inside was bored out, and inside of the body of the reamer was suspended on the spring the tee bar. Suspended from the lower end of the tee bar were the cutters, and this key which I spoke of was driven underneath the spring through the slot from the side of the body. The spring already had a tension on it, and the driv-

(Deposition of Robert E. Bole.)

ing of the key would increase this tension. It would increase this tension and bring the cutters up to their proper seats. The slot was a fraction larger all the way through than the largest depth of the tee, which allowed it to enter free and at the same time keep it straight. When the key snapped down into place, the lower projection of it fitted into the bore of the reamer, and there was an opening at the top which would be a little over the depth of the projection below.

Q. 16. What was that space to which you have last referred left for?

A. You had to leave that space in order to get the key into the body of the reamer.

Q. 17. You have referred to a tee bar. How did you propose to form that tee bar, and for what purpose was it to be used?

A. It was to be used to suspend the cutters. It was slotted, and through the slot the key was forced.

Q. 18. How long a slot, and for what purpose was the slot?

A. The slot was of a length to allow the cutters their full stroke or full sway.

Q. 19. For what purpose did they have such stroke?

A. For the putting in and pulling out the reamer from the hole.

Q. 20. Collapsion and expansion of the bits?

A. Yes, sir.

Q. 21. How were the cutters to be hung on the tee bar that you referred to? [515—454]

(Deposition of Robert E. Bole.)

A. We were to do away with the slot. The cutter was to have a projection at the upper edge, and the tee bar was to be made at its base practically square.

Q. 22. And the cutters or bits—

A. (Interrupting.) That was my intention at the time.

Q. 23. And the cutters or bits were hung on the projecting ends of this tee bar in what manner?

A. Are you referring to my idea at the time as to which was the best reamer?

Q. 24. The one that you described to Mr. Adams and Mr. Heber.

A. Those cutters were suspended by this lug over the top.

Q. 25. How was the spring that you refer to to be mounted in the bore of that reamer?

A. It was to be loosely mounted on the tee bar. Tension was to be taken on it by a nut and washer on top.

Q. 26. And then was there a coil spring surrounding the tee bar? A. Yes, sir.

Q. 27. And on what did the lower end of the spring rest?

A. It rested on a shoulder on the heavy part of the tee bar, the outside of this heavy part being practically the same diameter as the outside of the spring.

Mr. BLAKESLEE.—We ask that that answer be stricken out as not responsive to the question, and we call attention of counsel to the fact that the witness is not answering as to his plans, but rather as to construction, and the question did not involve

(Deposition of Robert E. Bole.)

completed construction.

Q. 28. (By Mr. LYON.) What was the purpose, Mr. Bole, of such key device as you explained to Mr. Adams and Mr. Heber?

A. It was for the purpose, principally, of quickly overcoming the difficulty that they had with the pins in the sides. At the [516—455] same time, the purpose developed that it was quicker to mount and dismount the cutters—quicker and simpler all the way through.

Q. 29. You had, then, prior to that time, been familiar with this block and screw type of Wilson under-reamer, had you?

A. Yes, sir; but I can't say how familiar.

Q. 30. And such under-reamer was giving substantial satisfaction with exception of the difficulty in removing the screws or pins to permit changing the bits for the purpose of resharpening or putting on new bits?

A. To the best of my knowledge it was giving satisfaction, with the exception of that defect; but, according to the reports on it, that was some defect.

Q. 31. And at the time you had this conversation with Mr. Heber and Mr. Adams in September, 1908, it was your object to overcome the trouble of removing the bits from the reamer, was it?

Mr. BLAKESLEE.—Objected to as leading and suggestive.

Mr. LYON.—The question is withdrawn.

Q. 32. What was the purpose of using or propos-

(Deposition of Robert E. Bole.)

ing to use the single-piece key which you have described?

A. The overcoming of the difficulty experienced with a block and screw type of Wilson reamer.

Q. 33. How did you propose at that time, in this conversation with Mr. Heber and Mr. Adams, to remove such single-piece key for the purpose of dismantling the reamer or removing the bits.

Mr. BLAKESLEE.—Objected to as not the proper method of proof. We will ask that the testimony be limited to what was said at the time of this purported conversation, and not what the proposition was before the house, but what was said with regard to any such proposition.

A. It was very simple. The one upper corner of the key was broken or planed off at an angle. By putting a drift or driving a [517—456] drift under this side of the key we could raise it up to such a position that the lower projection would come out and hit a little above the hole or slot in the side of the reamer. In that manner it would tilt the opposite side of the key downward and expose it to the opposite side of the reamer body, and then by taking the hammer and hitting this exposed side a crack, the key with the tension of the spring above would almost fly out. This was my contention at the time, and afterwards proved to be the case.

Q. 34. (By Mr. LYON.) After explaining this construction of under-reamer embodying such single-piece key to Mr. Heber and Mr. Adams in September, 1908, what did you first do with reference

(Deposition of Robert E. Bole.)

to having such a reamer built?

A. Mr. Heber gave me an order for such a reamer.

Q. 35. Do you remember when it was that he gave you such an order?

A. It was during this period of time. I can't just state the date exactly. I went from Maricopa to Coalinga, and on my way I mailed a letter to the Wilson & Willard Manufacturing Company of Los Angeles ordering this reamer.

Q. 36. Have you such letter? A. No, sir.

Q. 37. Please state what said letter contained with reference to this order for this 95/8 inch under-reamer for said Sunset-Monarch Oil Company.

A. I ordered this reamer to be made up and shipped immediately, and a description of the reamer was right on the letter. I described it as I went along, and made sketches as I desired it. The spear, I notified them that as soon as I returned to Los Angeles I would have forgings made to make it up at once, but to ship the reamer immediately—to make up and ship the reamer immediately.

Q. 38. You say this letter contained sketches of the under-reamer. [518—457] What parts were sketched out in that letter or order?

A. Principally the key and the tee bar. Prior to this the Wilson & Willard Manufacturing Company had a reamer which had a tee bar in something similar to the one that I intended to make, but this tee bar was to be made heavier and the key was a very simple proposition, and I intended to leave it until I got down and made it up. But at the same

(Deposition of Robert E. Bole.)

time, I told Mr. Willard to go ahead and make up this reamer, and as soon as I got back we would make it up and ship it up

Q. 39. What did such a letter contain in the shape of sketches of a tee bar and key? Please describe such sketches.

A. Well, they were rough sketches. The Wilson & Willard Manufacturing Company was familiar with their own manufacture of reamer bodies, so it was not necessary to make any full sketch of that except the change in the old block and screw type to this new reamer that I wanted to make.

Q. 40. I don't think you quite understand the question. The question is to describe the sketch or sketches contained in that letter. State just what they showed and what they were.

A. As I went along in the letter I described the new-style reamer and with each description I drew a sketch. I drew a sketch of this key and drew a sketch of the tee bar, and showed him how he could make it heavier than the old style, or the one that had broken all the time and gave them the trouble.

Q. 41. How in that letter did you show him that you could make such tee bar heavier?

A. By the sketch.

Q. 42. In what manner?

A. By enlarging the hold of the reamer and flattening out the spring.

Q. 43. How did you describe in that letter the use of this key [519—458] in the tee bar? Please give as near as you can the words of such description

(Deposition of Robert E. Bole.)

as you now recollect them.

A. The key was a 1-piece key, to be loosely mounted in this slot. It went through the side of the reamer and through the tee bar, which helped to compress the spring and which, when driven in place with the projection on the bottom, would snap into the bore of the body of the reamer.

Q. 44. The sketch of that key showed what kind of a surface the upper edge of the key had?

Mr. BLAKESLEE.—Objected to as leading. Let the witness describe the key.

A. The key is a kind of a simple proposition and yet is is very hard to describe. I can make a sketch of it.

Q. 45. By Mr. LYON.—Can you reproduce that sketch which is contained in that letter?

A. Yes, sir.

Q. 46. Please do so. And, at the same time, reproduce from memory the sketch of the tee bar as contained in that letter.

A. (Making diagram.) Those are the two sketches as near as I can now reproduce them.

Q. 47. And what does the upper of these two sketches show?

A. The upper of the two sketches shows the key in place in the body of the reamer when it is in working position to go in the hole. It shows the spring below compressed when the cutters are up in the body of the reamer. It shows a section of the spring and a section of the body.

Q. 48. Please mark with the word “key” the

(Deposition of Robert E. Bole.)

representation of the key in this sketch.

A. (The witness does as requested.)

Q. 49. Likewise, mark on this first sketch the tee bar with the words "Tee Bar." [520—459]

A. (The witness does as requested.)

Q. 50. And the spring in the same manner.

A. (The witness does as requested.)

Q. 51. What do the four sections unmarked represent? A. The reamer body.

Q. 52. Indicate the same with the term "Reamer Body." A. (Witness does as requested.)

Q. 53. This order was for what kind of bits or cutters? I mean the order that you sent in for the Sunset-Monarch Oil Company in September, 1908.

A. The order was for the ordinary bits or cutters used in the Wilson reamer at that time—that was not mentioned in the letter to my knowledge.

Q. 54. Then what other changes, if any, in such standard Wilson reamer did you suggest in such letter and order, other than the change in the tee bar and the use of the single-piece key?

Mr. BLAKESLEE.—Objected to as leading.

A. I had not suggested any other changes except that I had a description of the key as I wanted it made. I realized the fact that to change the cutters as I wanted to would necessitate great expense. The key and the tee bar would not. So these two sketches were practically what was mentioned in the letter in ordering this reamer.

Q. 55. (By Mr. LYON.) What does the dotted line in this top sketch that you have reproduced indicate?

(Deposition of Robert E. Bole.)

A. It indicates the bottom end of the key. It is supposed to be invisible on account of the tee bar being sketched over it.

Mr. LYON.—The sketch just reproduced by the witness is offered in evidence and we ask that it be marked “Bole’s Exhibit Reproduction of 1908 Sunset-Monarch Order Sketches.” [521—460]

(The said sketch so offered in evidence is marked as requested, together with the title of the court and cause, and the date upon which the same was offered in evidence.)

Q. 56. (By Mr. LYON.) I show you a postal card marked “Bole’s Exhibit Bole-Heber Postal Card,” and ask you if you have ever seen it before.

A. Yes, sir; that is my writing. I mailed that from Coalinga, according to the date on it. The Coalinga postoffice stamp is September 19, 1908.

Q. 57. By means of this postal card are you able to fix the date upon which you secured this order from Mr. R. L. Heber of the Sunset-Monarch Oil Company for this under-reamer which you referred to?

Mr. BLAKESLEE.—Objected to as leading.

A. It is evidently prior to September 19, or it was on September 18 or earlier, because from this postal card I do not believe I could have left Maricopa on September 19 and got into Coalinga on the same day. So it must have been September 18 or prior to that that I mailed this order to the Wilson & Willard Manufacturing Company of Los Angeles.

Q. 58. (By Mr. LYON). Did you keep a time-

(Deposition of Robert E. Bole.)

book of any kind with you during that time?

A. My time, when I was with the Wilson & Willard Manufacturing Company?

Q. 59. Yes, sir.

A. That was prior to this and afterwards—yes.

Q. 60. Have you such a time-book?

A. I couldn't call it a time-book; it is a memorandum-book. I have it, but I haven't it with me.

Q. 61. I will ask you to produce such time-book at the next [522—461] session of this testimony. Now, Mr. Bole, after you went to Coalinga, California, and were there on the 19th of September, 1908, did you thereafter return to Los Angeles, California?

A. Yes. I returned to Los Angeles, and my recollection is that I went to Maricopa Saturday or Sunday, and from there I went to Coalinga, and I think all told I was gone about a week. I know I was not working from the 12th to the 20th; I was away at Coalinga and Maricopa during that period.

Q. 62. And after the 20th of September where did you work?

A. I worked in the shops of the Wilson & Willard Manufacturing Company.

Q. 63. After you got back to the shops of the Wilson & Willard Manufacturing Company in Los Angeles, California, on or about the 21st of September, 1908, did you see Mr. Arthur G. Willard there?

A. Yes, sir.

Q. 64. Was Mr. Elihu C. Wilson there?

A. No, sir.

(Deposition of Robert E. Bole.)

Q. 65. Did you have any conversation with Mr. Willard in regard to this Sunset-Monarch order for under-reamers? A. Yes, sir.

Q. 66. Please state such conversation.

A. Mr. Willard told me that he had taken the matter up with Mr. Wilson, who was at Bakersfield, and that Mr. Wilson would not make the key that I desired.

Q. 67. Was that the whole of the conversation?

A. No, sir.

Q. 68. Please give the rest of the conversation.

A. Mr. Willard said that that reamer had proven a failure, and Mr. Wilson would never make it again; that he had made something like twenty-five or twenty-six, and the tee bars would break off just above the heavy part, just where the lower part of [523—462] the spring sets on its seat on the tee bar.

Q. 69. Is that all of the conversation?

A. Mr. Willard convinced me at the time, or tried to convince me, that it would not be policy to send this order up or to send this reamer as suggested, and in fact, he made it clear that Mr. Wilson would stand for no change in the reamer whatsoever, and he said that they had decided to send the reamer of the block and screw type, and that Mr. Wilson believed he would call on the Sunset-Monarch Oil Company and convince them, and that we could take a chance. I told them that I thought it would be returned.

Mr. BLAKESLEE.—We ask that all this answer be stricken out as hearsay, being mainly made up of

(Deposition of Robert E. Bole.)

what Mr. Willard is purported to have stated; that it is not the proper method of proof, nor the best evidence.

Q. 70. (By Mr. LYON.) Was there anything said in such conversation between Mr. Willard and yourself at that time with reference to the making of a heavier tee bar? A. Yes, sir.

Q. 71. Please state what it was.

A. I told Mr. Willard that we could overcome that difficulty of the tee bar breaking, and bore out the body of the reamer larger and we could flatten out the spring and put a flat spring in in place of a round spring, and get the same strength of spring and make a heavier tee bar, and, if necessary, we could make this key very thin and deep, and that would add strength to the tee bar.

Q. 72. After the conversation did you have at any time any conversation with Mr. Elihu C. Wilson in regard to the making of such an under-reamer embodying the single-piece key as you have designated and illustrated in your sketch?

A. Yes, sir; many times. [524—463]

Q. 73. During what period of time did such conversations take place?

A. I don't just remember when Mr. Wilson came to Los Angeles. Our pump business at that time was not very large, and until it got to be a paying proposition I had very little conversation with Mr. Wilson. After that we got more familiar and I brought this subject up on different occasions. Mr. Wilson believed that his reamer was as good as it

(Deposition of Robert E. Bole.)

could be made, and would not listen to me on that line. One time he did mention the fact that to put such a loose-piece key in there, that the mud would work in and interfere with the working of the reamer. And he explained that that was the reason that he fit his plugs in the block and screw type as tight as he did—to keep the mud out—and in the working up of the 2-piece key reamer he filed that to a perfect fit.

Q. 74. Did such parts as last referred to fit in that manner in the Wilson reamers?

A. They were fit in very tight.

Q. 75. Was there ever at any time one of these reamers made embodying such single-piece key?

A. Not to my knowledge, until the spring of 1911.

Q. 76. State the circumstances under which that reamer was constructed.

A. Mr. Wilson was having trouble; his sales were dropping off in the different oil fields, and the subject came up one day between him and me as to what was the cause of it. I suggested that a reamer such as I had ordered for the Sunset-Monarch Oil Company would overcome this difficulty, and he said, "It seems to me Mr. Willard and I had some correspondence on that." I said, "You certainly did," and he said, "What was that like?" I described the key and the tee bar as I had suggested in that letter at that time. That was some time along, I think, in the middle of January, 1911. [525—464]

Q. 77. And that time did you have any conversation with Mr. Elihu C. Wilson as to the manner of

(Deposition of Robert E. Bole.)

removing such single-piece key from such reamer?

Mr. BLAKESLEE.—Objected to as leading and suggestive. A. Yes, sir.

Q. 78. (By Mr. LYON.) State what that conversation was. A. We had several conversations.

Q. 79. Where and when?

A. In the shop of the Wilson & Willard Manufacturing Company.

Q. 80. Who was present at such conversations?

A. I don't remember of anybody but Mr. Wilson at any such conversation, with possibly one exception.

Q. 81. When was that, and where?

A. That was one time there when we were talking over this proposition. Mr. Wilson insisted that I couldn't get the key out of the reamer, and at that time a foreman that I had, Mr. Naphas, happened to come along with some work from the pump department, and I believe he heard part of the conversation.

Q. 82. You have heard the testimony of Mr. E. C. Wilson in this case, have you? A. Yes, sir.

Q. 83. And his statement in regard to an alleged conversation and an alleged conference which he states he called to discuss this single-piece key. What have you to say with reference to such testimony?

A. I don't remember any such conversation where he called a party of men together in the shop there as he describes.

Q. 84. Have you any sketch which you can produce which was made at any time in 1911 of such single-

(Deposition of Robert E. Bole.)

piece key, either with or without the removing device for removing such key?

Mr. BLAKESLEE.—Objected to as grossly leading and suggestive. [526—465]

A. I have a sketch. At the time I did not believe that Mr. Wilson would lay any claim to that key whatsoever, and at that time he said something about could I make a tool to remove this key, and I made a tool, or a sketch of such a tool, which I have at the present time.

Q. 85. (By Mr. LYON.) Please produce such sketch. A. (The witness produces a sketch.)

Q. 86. When was this sketch made?

A. January 27, 1911.

Q. 87. And where was it made?

A. It was made in the office of the Willard & Wilson Manufacturing Company.

Q. 88. I notice that it contains the signatures of two witnesses. Who were these men?

A. Mr. W. H. Fahnestock, who is now bookkeeper of the Wilson & Willard Manufacturing Company, and Mr. E. F. Grigsby, who was at that time shipping clerk.

Q. 89. And what was the purpose of making this particular sketch?

A. Mr. Wilson didn't believe I could get my key out of the reamer, and I told him I could devise such a tool. I did devise it, and drew it up and had it witnessed.

Mr. LYON.—The sketch produced by the witness is offered in evidence as "Bole's Exhibit January 27, 1911, Sketch."

(Deposition of Robert E. Bole.)

(The said sketch so offered in evidence is marked as requested, together with the title of the court and cause and date on which the said exhibit was offered in evidence.)

Q. 90. (By Mr. Lyon.) You have stated, I believe, that a reamer embodying this single-piece key device as devised by you [527—466] was manufactured by the Wilson & Willard Manufacturing Company in the spring of 1911. Please give us the history of such construction.

A. Somewhere around the middle of January, Mr. Wilson, in taking this matter up of this new-style reamer, still held out that this key would not do the work. But he liked the idea of the heavier tee bar, and he decided to make a reamer along that line, increasing the size of the weakest part of the tee bar, and flattening out the spring and boring out the reamer. At that time he intended to use his old 2-piece key in this reamer, with a plug to hold it in place, and, accordingly, he gave an order to change over a reamer that he had in stock there and bore out the body and change it over to fit an extra heavy tee bar or new tee bar and a spring. I believe he gave an order for a tee bar and spring together, and an order to change over the reamer. He did not give an order for cutters, because he had those in stock. He did not give an order for a bottom bolt because he had those in stock; he did not give an order for a 2-piece key, because he had those in stock. He did not give an order for the plug to fit in behind the two-piece key. He had plugs in stock.

(Deposition of Robert E. Bole.)

I persuaded him to let me make up this 1-piece key, and I made a sketch of such key. This sketch was attached to an order that was made out for the making up of that key, and it had my name on it. I have never seen that order since. The reamer was bored out—the bore of it was enlarged; the slot was put in, and the single-piece key was made up under my instructions. The key was fitted in the body of the reamer and worked perfectly, and was thereafter adopted. [528—467]

Q. 91. And how was that key mounted in the body of that reamer?

A. The key was loosely mounted in this slot in the body of the reamer. By “loosely” I mean where there was no tension on the key by the spring above the key would be perfectly loose. You could put it in and take it out, and it would be perfectly free. Of course, when you put the tension on the spring, the lower part would snap into place in the reamer body.

(The hour of 5:15 P. M. having arrived, a discussion is taken up between counsel concerning the time for resuming the taking of proof, counsel for Bole suggesting a session this evening, counsel for Wilson stating that it is inconvenient for his client to be present.)

Mr. BLAKESLEE.—Let the record show that these proceedings were taken pursuant to no formal notice, and that we have proceeded upon a mere informal agreement between counsel to commence the taking of proofs on behalf of Bole at the hour of

(Deposition of Robert E. Bole.)

9:30 A. M., this present day; that the party Wilson and his counsel were here present at that time and were informed that no proceedings would be taken until a later hour; that it was then 5 minutes past the hour of 11 A. M., when counsel for Bole notified counsel for Wilson that he would proceed, and we then repaired to this place, and testimonay has been taken from that time until the present hour, 5:15 P. M., subject to a noon adjournment of an hour and a half; that there has been no agreement as to the taking of any testimony out of the regular hours of court, and ordinary business hours; that seven weeks of the time for the party Bole to take proofs have elapsed and no proofs have been taken by the party Bole prior to the present day; that an engagement [529—468] and convenience of the party Wilson and his counsel make it irksome and inconvenient to proceed with night sessions in this case, as requested by counsel for Bole; that we can see no good and sufficient reason as yet proffered for such night sessions; and at this present hour of 5:15 P. M. we will ask the notary to note an adjournment until to-morrow morning at 10 o'clock A. M., whereupon the party Wilson and his counsel withdraw.

Mr. LYON.—While counsel for Wilson is yet present, we proceed with the direct examination of Mr. Bole.

Q. 92. You have heard the testimony of Mr. E. C. Wilson to the effect that at the time when in 1913 you made a settlement of your pump business (At this time counsel for Wilson retires from the room.)

(Deposition of Robert E. Bole.)

with the Wilson & Willard Manufacturing Company, that you stated to him, E. C. Wilson, that he need not fear your making any claim to the invention involved in this interference. What have you to say in regard to such testimony?

A. I don't remember any such conversation whatever.

Q. 93. Did you have such a conversation with him? A. No, sir; I did not.

Mr. LYON.—Direct examination closed. Opportunity is now afforded counsel for Wilson and the party Wilson to cross-examine the witness. It being now 5:17 P. M., counsel for Wilson having departed during the asking of the last two questions, and having abandoned the proceedings, an adjournment is now taken until 1 o'clock P M, on Tuesday, September 22, 1914. [530—469]

Redirect Examination,

(By Mr. LYON.)

Q. Referring to the conversation with Mr. W. H. Fahnestock at his house, please give that conversation.

A. As near as I can recollect, when I went in Mr. Fahnestock explained to me that his wife and the children were at the picture show, or something like that; and he told me that he did not remember ever signing this sketch, and he wanted me to say something that would recall to his mind what had occurred at the time in order that he could remember having signed that sketch. He said he wanted to help me out if he could, and that he wanted to

(Deposition of Robert E. Bole.)

[531—470] remember it if he could, but he wanted me to refer to something that occurred at that time that would cause him to remember having signed the sketch; and I told him, "Mr. Fahnestock, I can't tell you anything that occurred at that time. You are going on the stand to-morrow to testify in this case, and you can't expect me to tell you anything about it." I says, I wouldn't do it, and I refused absolutely to tell him what I knew about it. And then he got mad, and said, "Well," he says, "this man Carlson says these signatures are forged, and it is up to you. If you don't want to help yourself out, I don't care." He says, "I believe they are forged." And I says, "Well," I says, "all right; if you believe they are forged you go on the stand to-morrow and say so." That was the sum and substance of that conversation.

Q. How did you come to go to Fahnestock's house?

A. Mr. Fahnestock was at your place looking for me two or three times that day, and called me up on the telephone that night and asked me if I wouldn't come out to his house.

Q. And before going there you saw me about it, did you?

A. Before going there I called you up by telephone at your house and told you what he wanted.

Q. What did I tell you?

A. You told me to go out and see him, and you advised me to be careful what I said to him; that he was probably trying to lay a trap of some kind to catch me.

(Deposition of Robert E. Bole.)

Q. Mr. Fahnestock was at that time in the employ of the Wilson & Willard Manufacturing Company?

A. The Wilson & Willard Manufacturing Company. He further undertook to point out in the signatures where he didn't make a signature like that, and where he didn't make a hook on his "W," or a disconnected "a," or something like that. He went through that. Another thing he said, I said, "Do you actually think, Mr. Fahnestock, that I would do a thing like that?" He says, "Why not?" [532—471] He says, "The stakes are high."

Q. You have been interrogated on cross-examination as to part of a conversation which you had with Mr. A. G. Willard in regard to a search on the records of the Wilson & Willard Manufacturing Company for this Sunset-Monarch order of 1908. Have you given us all of that conversation that you now remember?

A. For the search of the record—

Q. For the Sunset-Monarch order; yes, sir.

A. All of it that I can recall now.

Q. For the purpose of refreshing your recollection, was there anything said in that conversation between Mr. A. G. Willard and yourself as to who was the inventor of this single-piece key device?

A. I don't recall that, Mr. Lyon. Mr. Willard knew that I was the inventor of it.

Mr. BLAKESLEE.—We ask that that be stricken out as a statement or conclusion of the witness.

The COURT.—The motion is granted.

(Deposition of Robert E. Bole.)

Q. (By Mr. LYON.) What was the purpose of this search by Mr. Willard?

A. Mr. Willard wanted to see what the shape of the key was exactly, to refresh his memory.

Mr. BLAKESLEE.—We object to that as a conclusion, and not a statement of what Mr. Willard said.

The COURT.—He didn't ask what Mr. Willard said. He asked for his purpose, and there was no objection to the question.

Q. (By Mr LYON.) You have been asked to try "Defendants' Exhibits 12 and 11" in "Defendants' Exhibit 1," the under-reamer, and see if you can remove the key, "Defendants' Exhibit 11," from the reamer, by such device "Defendants' Exhibit 12." Did you make this device, Exhibit 12?

A. No, sir. [533—472]

Q. What, in your opinion, based upon your experience as a mechanic, would be necessary with this device "Exhibit 12" to enable it to be driven under such key?

Mr. BLAKESLEE.—We object to that as calling for mere matter of opinion and not a statement of facts. Let the witness testify to the nature of the device and compare it with anything else. But his opinion is not proper.

The COURT.—I think I will overrule the objection. I would like to know what he thinks the difference is between this device and that other one.

A. You could drive this tool in there and get it under there, if you would break the lower corner of

(Deposition of Robert E. Bole.)

the slot on one side of the reamer body so as you could just enter this a little bit—just start it. Then you could drive this in. Or, by breaking the corner of the key just enough to allow this to enter. This probably should be a little harder. It looks like it has been case-hardened. It looks like it should be a little harder and be sharpened a little.

Q. (By Mr. LYON.) Since the noon adjournment, have you tried to lift up the key in “Defendants’ Exhibit 11” as exhibited in “Defendants’ Exhibit 1” by the key-removing tool of Defendants’ Exhibit 1”?

A. Yes, sir.

Q. What did you find with regard to the two sides of such key in such attempt?

A. I could not get it in on one side, but I could on the other, though.

Q. And why was that?

A. Because the space on one side is probably of a shape which allows this to start a little better than on the other side. Possibly there is a little more space to allow it to start.

Mr. LYON.—That is all. [534—473]

Recross-examination.

(By Mr. BLAKESLEE.)

Q. Now, you have testified further as to what took place at the time of your visit to Mr. Fahnestock at his house in October, 1914. At that time did not Mr. Fahnestock say to you that he didn’t remember of your explaining anything about that sketch, and did you not then say that you just asked Mr. Fahnestock to witness it and that is all?

(Deposition of Robert E. Bole.)

Mr. LYON.—We object to that as a mere repetition. It is exactly the same question as before.

The COURT.—I don't think it is. It is plainer than it was before. Answer the question.

A. No, sir; I did not.

Q. (By Mr. BLAKESLEE.) You have spoken of certain modifications that might be necessary in the shape of the lever and key which were attempted to be used this morning in the removal of the key from the exhibit reamer "Defendants' Exhibit 1." The key and lever conform to the sketch, do they not, at the parts which you say might well be modified?

A. Well, that is a pretty small sketch. I couldn't say that. That thing would have to be tried out, anyhow. I didn't refer to the key and this tool alone. I said you would not have to alter it,—this tool and the key, you could round out the bottom of the slot a little.

Q. And sharpen the lever a little bit on the end?

A. Yes, you can do that, but I don't believe it would be necessary.

Q. Then if you did that, you would have the pointed end of the drift that you thought of in 1908, as you say. Isn't that correct?

A. If you sharpen this?

Q. Yes. [535—474]

A. I say it is not necessary to sharpen this.

Q. It is not?

A. No. This could probably be ground off a little bit sharper than it is. It is rather blunt. That has probably been made so that thing won't come out.

(Deposition of Robert E. Bole.)

Q. In other words, you couldn't get it in unless it were shaped off a bit; is that correct?

A. No, sir; you could get it in that reamer.

Q. Can you get it in now?

A. If the reamer is not hardened so that I couldn't touch it with a file, I could get it in now.

Q. Can you get it in now at either end of the key?

A. You mean without altering the reamer?

Q. Yes, sir.

A. Not without altering the reamer itself.

Mr. BLAKESLEE.—That is all.

Mr. LYON.—That is all.

Q. (By the COURT.) Did you during the adjournment take this key No. 12 and apply it to "Defendants' Exhibit 1" and get the key out?

A. No, sir; it was the key-removing tool that they use now. I could only remove it on one side with that tool.

The COURT.—All right. [536—475]

[Testimony of Harry Naphas, for Plaintiffs (in Rebuttal).]

HARRY NAPHAS, called as a witness on behalf of complainant in rebuttal, testified as follows:

Direct Examination.

(By Mr. LYON.)

Q. Your name is Harry Naphas? A. Yes, sir.

Q. You live in Los Angeles? A. Yes, sir.

Q. What is your occupation? A. Machinist.

Q. With whom are you employed?

A. The Southern Pacific Railroad.

Q. In what department?

(Testimony of Harry Naphas.)

A. The railroad department; the locomotive department.

Q. At the Southern Pacific shops? A. Yes, sir.

Q. As a machinist? A. Yes, sir.

Q. Were you at any time in the employ of the Wilson & Willard Manufacturing Company?

A. Yes, sir.

Q. When? A. I started there in 1910.

Q. And approximately how long—

A. I left there along in 1912, in November.

Q. In what department of the Wilson & Willard Manufacturing Company did you work?

A. The Bole Pump Company.

Q. You are, then, acquainted with Robert E. Bole, one of the complainants?

A. Yes, sir. [537—476]

Q. And with Mr. E. C. Wilson, one of the defendants? A. Yes, sir.

Q. At any time during your employment with the Wilson & Willard Manufacturing Company did you know of any work being done on an under-reamer in the shop of the Wilson & Willard Manufacturing Company? A. What kind of work?

Q. Any kind of an under-reamer.

A. I have seen all kinds of work done on under-reamers there.

Q. Did you ever see a single-piece key device used in any of those under-reamers?

Mr. BLAKESLEE.—Objected to as calling for a conclusion and not a statement of facts.

The COURT.—The objection is overruled.

(Testimony of Harry Naphas.)

A. Yes, sir.

Q. (By Mr. LYON.) When did you see the first of such single-piece key devices?

A. Sometime in February, 1911.

Q. Where? A. At Wilson & Willard's.

Q. Under what circumstances?

A. Well, the circumstances, the first I seen was they were having a dispute on the key and I at that time was foreman of the Bole Pump Company and went over to ask Mr. Bole something about some pumps we were building, and Mr. Bole was standing there and Mr. Wilson came down the shop, and they were trying to get the key out—Mr. Bole was—I wasn't—and Mr. Wilson says, "You have got it in; now let us see you get it out."

Q. Give us the rest of the conversation and state what was done at that time.

A. Mr. Bole took an old file, something similar to this, which I used to file my plungers with, and drove it in and [538—477] started to wedge it, and it started to come, and I walked away. And that is all I—

Q. Who was the Mr. Wilson that you say was there at that time?

A. Mr. Wilson sitting right there.

Q. You mean E. C. Wilson?

A. E. C. Wilson, not Web.

Q. Prior to that time had you ever had any knowledge of such single-piece key being made in the shop of the Wilson & Willard Manufacturing Company?

A. No, sir.

(Testimony of Harry Naphas.)

Q. I mean when did you first know that a single-piece key was being made there?

A. That was around in January or February, 1911.

Q. Where did you first see such a single-piece key, yourself, I mean?

A. I seen it setting on the milling machine when the reamer was being milled. When they were milling it out for the cutters to set in.

The COURT.—I don't understand that. What were they milling out? A. Milling out the sides.

Q. For putting that slot in for the key?

A. No; that was done on the drill press, I believe.

The COURT.—Go ahead with the witness.

Q. (By Mr. LYON.) Did you ever see the single-piece key itself before you saw Mr. Bole prying it up with the end of a file in the presence of Mr. E. C. Wilson? If so, tell us where you saw it.

A. Only in the shop, coming in in the morning while it was setting on horses, there.

Q. Not the reamer, but the key itself.

A. Oh, the key? The first I seen that was when Mr. Wills handed it over to Robert E. Bole at his desk.

Q. What desk? [539—478]

A. At my desk where I used to keep the shop orders.

Q. Was there any conversation at that time?

A. No, sir; none whatever.

Q. What did Mr. Wills do with this single-piece key at that time?

A. He gave it to Mr. Bole. That is, he didn't give

(Testimony of Harry Naphas.)

it to him; he laid it on my desk like that, and he simply picked it up.

Q. Do you know what Robert E. Bole did with that key at that time? A. No, sir; I do not.

Mr. LYON.—That is all.

Cross-examination.

(By Mr. BLAKESLEE.)

Q. When was it you saw Mr. Bole attempt to put the end of a file under this single-piece key in a reamer? A. In the morning—one morning.

Q. What morning was it?

A. It was on a morning about the middle of February, or maybe a little later, of 1911.

Q. How much later than the 15th of February?

A. I couldn't say exactly as to the day.

Q. Had you ever seen that key in that reamer before? A. No, sir.

Q. Do you know who put that key in the reamer?

A. No, sir.

Q. You didn't see the end of the file go in under the key, did you? A. Yes, sir.

Q. What happened to the key then?

A. The key started to wedge itself out.

Q. Did it move out as well as lift up? [540—479]

A. Yes, sir; it gradually lifted up, and then I seen Mr. Bole take a hammer and then hit it, and then it started to move out and up at the same time.

Q. It moved up and out when he hit it. And you didn't go away before he hit it?

A. Yes, sir; after he hit it I walked away.

Q. You didn't see the key come out?

(Testimony of Harry Naphas.)

A. No, sir.

Q. You don't know how long that key had been in there before? A. No, sir.

Q. Did you ever see anybody else put a pointed instrument under that key? A. No, sir.

Q. Did you see that reamer again that day?

A. Yes, sir; I seen it setting there.

Q. Was the key in it?

A. I didn't pay no attention whether it had the key in or not, after that, because I was busy and didn't have no time to look at it.

Q. Did you inspect it at any other time?

A. No, sir.

Q. Did Mr. Bole ask you to watch him?

A. No, sir.

Q. While he put that file under it?

A. No, sir. I had business there. We were making some special pumps, and I went over to ask him about it.

Q. And you are sure Mr. Wilson was there?

A. Yes, sir.

Q. Nothing was said?

A. No, sir. Mr. Wilson came up and said, "You have got it in; now how are you going to get it out?" or words to that effect.

Q. And you don't know whether Mr. Houriet or anybody else around the shop had driven a file or chisel in there before, do you? [541—480]

A. No, sir.

Q. You won't say definitely that it was before the 29th of February, 1911, will you? A. No, sir.

(Testimony of Harry Naphas.)

Q. Have you any way of fixing that time?

A. No, sir.

Q. Do you know that it was in February, 1911?

A. Yes, sir.

Q. How?

A. Because we were making them pumps at that time, and it was in February when we made them. That is how I recall the time, that it was in the latter part of January and February that we were making the pumps.

Q. What kind of pumps?

A. We were making some special large 4-inch pumps.

Q. When were they finished? A. In February.

Q. Have you referred to any records to establish that fact? A. No, sir.

Q. It is just a case of memory from that time?

A. Yes, sir.

Q. What did you make in March, 1911?

A. Pumps, the same way.

Q. What size pumps?

A. That is, our standard-size pumps.

Q. Four-inch?

A. No, sir. These were special 4½ inch pumps.

Q. What size were you making in March, 1911?

A. Four-inch.

Q. When did you start making these 4½ inch pumps?

A. Well, we just made one special one at that time for some oil company in Santa Paula, where they were having some water trouble.

(Testimony of Harry Naphas.)

Q. And you think that was finished by the 1st of March, 1911? [542—481]

A. Somewheres around that neighborhood.

Q. Would you swear that it was finished before the 5th of March, 1911?

A. I won't state no date when it was finished, just to the day, exactly.

Q. You won't say it was the 5th of March. You have had a talk with Mr. Bole, within the last few days, haven't you?

A. Yes, sir. Yesterday he came to the shop and asked if I would come down to-day, and I said yes; and he sent a man over for me and I came here.

Q. What conversation did you have with him yesterday?

A. Didn't have any conversation at all. But he said he was going on trial for that key, and asked if I recalled that time and I says yes.

Q. Did he ask you what you recalled?

A. Yes, sir; he asked me if I recalled that I heard Mr. Wilson—

Q. And he asked you if you recalled the time that this incident with the file took place, didn't he?

A. No; he didn't exactly ask me the time.

Q. Did he tell you the time? A. No, sir.

Q. What did he have to say about the file that was used then?

A. He didn't have nothing to say about the file. I said, "You used an old file." I told him that he used an old file at that time. I says, "I recollect that you used an old file."

(Testimony of Harry Naphas.)

Q. Were you in Los Angeles all last year?

A. Yes, sir.

Q. Did Mr. Bole ask you at that time to testify for him about any of these matters in any manner?

A. No, sir.

Mr. BLAKESLEE.—That is all. [543—482]

Q. (By the COURT.) Was the file that was driven in there changed in any way, or was it a natural file? A. It was a file just similar to this one.

Q. It had been changed a little bit?

A. Well, it had been changed. It was an old, broken file.

Q. Well, had the end of it been changed?

A. Yes, sir.

Q. How?

A. Just simply similar to this here, so he could start it underneath the key. Otherwise, you couldn't get the file in there if it was blunt. So it was sharpened on the end.

Q. Since that date to whom have you told what you saw there? A. From now?

Q. From the time you saw and heard what occurred there about getting that key out, up until yesterday, did you tell anybody about it?

A. No, sir; I haven't seen nobody. I haven't seen one of the boys at the shop that I worked with or anybody to speak anything about it. In fact, I didn't know anything about it.

Q. Now, who all were there at the time this occurred?

A. Mr. Bole and I were there, and Mr. Wilson

(Testimony of Harry Naphas.)

came down in the shop in the morning, and Mr. Bole had the key in there and I went up and Mr. Wilson came down and said, "Now, how are you going to get it out?"

Q. Nobody else there present?

A. No, sir. He was standing looking at it with the key in there.

Q. This is the first time you ever testified about it?

A. Yes, sir.

Q. You never gave any evidence before about it to anybody?

A. No, sir. Mr. Bole came over and he was only in the shop about ten minutes. [544—483]

Q. At that time where were you working?

A. At the S. P. shops when Bole came over there.

Q. You had been working for Wilson?

A. And Willard.

Q. When had you quit there prior to seeing this thing driven in?

A. I quit there in November, 1912.

Q. And this occurred in— A. 1911.

Q. In 1911? A. 1911.

Q. When did you go to work for them?

A. 1910.

Q. I thought you said you were working at the Southern Pacific at that time in 1911?

A. No, sir. He asked where I was working now. Southern Pacific.

Q. Where were you working in February, 1911?

A. Wilson & Willard. I started to work there in 1910 and left there in November, 1912.

(Testimony of Harry Naphas.)

The COURT.—That is all I desire to ask.

Mr. BLAKESLEE.—I want to recall the witness for a couple of questions, if you are through.

Q. Do you know whether the valves and cages for those Bole 4½ inch pumps were made in the Wilson & Willard Manufacturing Company shops in 1911?

Mr. LYON.—We object to that as immaterial.

The COURT.—Let him answer the question.

A. They were bought from the Ackelson Company.

Q. (By Mr. BLAKESLEE.) Ackelson Company of this city? A. Yes, sir.

Q. You are sure of that?

A. It was either the East Side Machine Shop or Ackelson's Machine and Tool Works, at that time.

[545—484]

Q. Was there more than one such lot of valves and cages bought for Bole pumps?

A. Yes, sir. We used to order them right along from 1910 till I left there, from the East Side Machine Company and the Ackelson Company.

Q. Was that for all different sizes of pumps?

A. Yes, sir.

Q. Nothing especially ordered out of the shop for these 4½ inch pumps? A. Not as I can recall.

Q. You were the foreman of the Bole Pump Company, weren't you? A. Yes, sir.

Q. Were these the very first 4½ inch pumps made there for the Bole Pump Company?

A. Yes; I think they were the first ones that we were working on, and that is how I happened to be there, on account that the coil was so small that we

(Testimony of Harry Naphas.)

couldn't get the size of the bore. The hole would not clean up so that we could get a smooth cut there.

Q. And you were employed by the Bole Pump Company all the time that you were at the Wilson & Willard Manufacturing Company shop, were you?

A. I worked for the Bole Pump Company and got my check through Wilson & Willard.

Q. But you were Mr. Bole's man? A. Yes, sir.

Q. His foreman? A. Yes, sir.

Q. Responsible to him? A. Yes, sir.

Q. In other words, you took your orders from him?

A. He was my superior officer, in other words.
[546—485]

Redirect Examination.

(By Mr. LYON.)

Q. You say that Mr. Bole came to see you yesterday about noon at the Southern Pacific shops?

A. Yes, sir.

Q. Now, please tell us who first mentioned anything about your having seen this under-reamer and Mr. Bole's removing the key, you or Mr. Bole.

A. I did first. Bob says he was down in court, and I says, "Are you having trouble with that key?" That was all that was said. That is all I said. And Bob said, "Yes." And he says he was going to subpoena me, and I said, "Don't subpoena me; I will come without being subpoenaed, because I don't want to be subpoenaed," and that is all there was said about it. He sent a man up to-day at ten minutes after twelve to get me.

(Testimony of Harry Naphas.)

Recross-examination.

(By Mr. BLAKESLEE.)

Q. When did you first know there was a controversy about the key?

A. I knew it the first time in November—I think it was November, 1913.

Q. How did you come to know about it at that time?

A. Mr. Welch works in the county garage, and I was there one day and he said he heard Bob was having some trouble, and that was all that was said.
[547—486]

[Testimony of August F. Adams, for Plaintiff (in Rebuttal).]

AUGUST F. ADAMS, called on behalf of complainants, in rebuttal, testified as follows:

Direct Examination.

(By Mr. LYON.)

Q. What is your occupation, Mr. Adams?

A. By trade I am a machinist.

Q. And where are you employed at the present time? A. Sunset-Monarch Machine Works.

Q. In what capacity?

A. Foreman of the shop.

Q. And how long have you been foreman of the shop?

A. I have been foreman of the shop since 1909.

Q. Prior to that time where were you employed?

A. Why, I was working in the shop prior to that time as a machinist.

Q. And for how long had you worked in the shop

(Testimony of August F. Adams.)

as a machinist? A. From March.

Q. March, 1908? A. March, 1908.

Q. Are you acquainted with Mr. Robert E. Bole, one of the complainants here? A. Yes, sir.

Q. How long have you known him?

A. I have known him since 1902.

Q. Did you see Mr. Robert E. Bole at any time during 1908?

A. Yes; I saw Mr. Bole during 1908.

Q. Where?

A. I saw him in Los Angeles here in the summer, and he come to the shop in 1908 to take the position of foreman of the shop that I worked in.

Q. Well, what time in 1908 was that? [548—487]

A. It was in September, along about the middle of September.

Q. Did he take that position as foreman of the Sunset-Monarch shop?

A. He did not.

Q. Do you know why not?

A. Well, Mr. I. E. Seegar brought a man down from San Francisco.

Q. While Mr. Bole was there in Maricopa, in September, 1908, at the Sunset-Monarch shops, did you have any conversation with him in relation to underreamers? A. Yes; I did.

Q. Where was such conversation had?

A. It *taking* place in the machine shop at the lathe that I was running.

Q. Please tell us what that conversation was, and what either of you did during such conversation,

(Testimony of August F. Adams.)

giving the substance of the conversation, and the words, as you recollect them, as nearly as you can.

A. Why, he told me that he had got an order from Mr. Heber for a spear and an under-reamer; and he told me, at the time, he was going to put in the keys; that Mr. Heber did not like the plug and screw type reamer, and that he had gotten the key device, and he drewed such a key on my lathe.

Q. Go ahead and finish the conversation. Pardon our interruption.

A. He drew a sketch of the key on the lathe with a piece of chalk. That is all the conversation that I recollect.

Q. You testified in behalf of Mr. Bole in the interference proceeding, didn't you? A. Yes, sir.

Q. And at that time made a reproduction, according to your recollection of such sketch as Mr. Bole made it? A. Yes, sir. [549—488]

Q. I show you a paper and ask you if you know what it is. A. Yes, sir.

Q. What is it?

A. That is a copy of the key for a Wilson under-reamer.

Q. When did you see this particular paper before?

A. I think at the interference hearing or suit.

Q. Do you know who made that drawing?

A. I do not know who made it.

Q. Can you make us a reproduction of the chalk sketch that Mr. Bole made upon the lathe there in the Sunset-Monarch shop in September, 1908, during the conversation that you have referred to?

(Testimony of August F. Adams.)

A. Yes, sir.

Mr. BLAKESLEE.—Let the record, please, show what was shown the witness. Let it appear on the record that the witness just had shown him “Boles Exhibit Adams Sketch,” offered in evidence in Interference No. 37,126, in re Interference Wilson vs. Bole.

Mr. LYON.—Please make such a reproduction of such chalk sketch, as you now remember it.

A. The sketch was on that order (making sketch).

Mr. LYON.—We offer this in evidence as Complainants’ Exhibit “H.” That is all. [550—489]

Cross-examination.

(By Mr. BLAKESLEE.)

Q. You and Robert E. Bole, the complainant, have been close friends for years, have you not?

A. Yes, sir.

Q. How many years? A. About twelve years.

Q. You call him “Bob,” and he calls you “Gus”? Isn’t that so? A. Yes, sir.

Q. You would do a whole lot to help “Bob” out, wouldn’t you? A. I surely would.

Q. Now, you worked at one time in the Bakersfield Iron Works shop, didn’t you? A. Yes, sir.

Q. At Bakersfield, California? A. Yes, sir.

Q. Who was superintendent of the shop at that time?

A. When I first went to work there George Barnes was superintendent of it.

Q. And who was, next? A. Mr. E. C. Wilson.

Q. One of the defendants in this case?

(Testimony of August F. Adams.)

A. Yes, sir.

Q. And Wilson under-reamers were being made at that shop, weren't they?

A. They were; but I was not employed in the shop—in the Bakersfield shop. I was in the field shop, where they did repairing, pipe-line work.

Q. You were out in the field? A. Yes.

Q. Didn't they have some kind of a key device on the gib order for holding the lower end of the spring?
[551—490] A. They did not.

Q. Didn't they have two pieces to put in under the spring to hold it?

A. They had a two-piece key; yes.

Q. They had a two-piece key, which was wedge-shaped, and one had a little shoulder going down into the bore of the reamer, and the upper one was to hold the other by a plug? A. Yes, sir.

Q. You saw quite a number of those, didn't you?

A. Yes; I saw quite a few of them.

Q. How many did you see of that type prior to September, 1908?

A. I haven't saw so many. Probably a half a dozen, or such a matter.

Q. And since September, 1908, and up to, we will say, the first of 1912, you saw a few more, didn't you?

A. Yes; I have saw quite a few.

Q. You worked on them, and took them apart?

A. Worked on them.

Q. And repaired those reamers? A. Yes, sir.

Q. And since the first of 1912 you have seen a good many Wilson under-reamers with the single-piece

(Testimony of August F. Adams.)

key, haven't you? A. Yes, sir.

Q. How many do you suppose?

A. Oh, I could safely say a dozen, twelve or fifteen of them.

Q. And what have you had to do with them during that time?

A. Well, the repair part, that is, the repair work that we have had to do on them, was chiefly on the working of the jaws.

Q. And you also have had considerable to do with what is known as the block and screw type, or pin and screw type, Wilson reamer, haven't you?

A. Yes, sir. [552—491]

Q. With a block with this spring? A. Yes, sir.

Q. When did Mr. Bole, if ever, speak to you again about this thing? You say he sketched it on your lathe with a piece of chalk.

A. It seems to me like it was in the following summer, of 1909.

Q. Of 1909. Under what circumstances?

A. He was talking of having it made. I always complained about the way we had to work on those under-reamers in regard to getting the keys out. We have always had to drill them. And I was interested in that part of it.

Q. What keys were you last referring to?

A. On the two-piece key.

Q. Those were like the two-piece keys shown in these two blue-prints, were they?

A. Yes; those were.

Mr. BLAKESLEE.—Let it be shown the witness

(Testimony of August F. Adams.)

has just had submitted to him "Defendants' Exhibit Wilson Exhibit Photo 'B' of Wilson's Reamer Two-Piece Key Device," and "Defendants' Exhibit Wilson's Photo Exhibit 'A' of Two-Piece Key Device."

Q. Do you state positively that Mr. Bole did not make any sketch for you, in September, 1908, of this two-piece key device? A. Yes, sir.

Q. He did not? A. He did not.

Q. When you came down to Los Angeles to testify for Mr. Bole in the interference, last fall, did you see, before testifying, anything that showed the two-piece key—one-piece key?

A. Before testifying?

Q. Yes.

A. I saw that small sketch or drawing. [553—492]

Q. This is it (showing)? A. Yes, sir.

Q. And Mr. Bole was discussing it with his attorney, Mr. Lyon, wasn't he? A. Yes, sir.

Q. What did they say about it?

A. It seems like the conversation ran like this—there was a contrast between the signatures and the actual drawing.

Q. In what respect did they speak of that contrast?

A. Well, that is about all I recollect of it.

Q. You can't remember their words, or any of them?

A. I can't remember that; no.

Q. And you saw this sketch at that time?

A. I just saw the sketch at that time. It was in

(Testimony of August F. Adams.)

evidence at that time.

Mr. BLAKESLEE.—Let it be shown that the witness has just referred to “Defendants’ Exhibit Boles Exhibit January 27th, 1911, Sketch”—or “Complainants’ Exhibit,—

A. (Continuing.) I want to state that it was not shown to me. It was there in evidence, and all the evidence was out there, on that morning, and they didn’t take any that day, on account of some other case, and it was laying there, and I saw it.

Q. And you had a good chance to look over the exhibits there? A. I just saw that exhibit.

Q. And what did you recognize in the exhibit?

A. I didn’t recognize anything.

Q. Mr. Bole’s signature?

A. The key was all I looked at.

Q. Was your attention directed to that key by anybody?

A. No. It was owing to the fact that the key was the argument, that I noticed the key.

Mr. LYON.—That is not an answer to the question. I would like [554—493] to have the question read to the witness.

(Question read by the reporter.)

A. (Continuing.) It was not.

Q. How did you know that this key was the subject of the controversy?

A. Owing to the fact that it was the reamer, and knowing that Mr. Bole had talked to me about that same thing before.

Q. Did you know that he was in a controversy over

(Testimony of August F. Adams.)

it? A. Yes; I did.

Q. You don't remember anything said at the time you made this sketch in chalk up there in Maricopa in 1908?

A. He said the reason he was getting the order for the under-reamer from Mr. Heber was owing to the fact he was putting a different key in it; and that is how he come to show me the key—the sketch of the key, rather.

Q. Did he show you anything beside the outline of the key? A. He did not, at the time.

Q. Did he state how the key was to be used?

A. He told me he put it in the slot instead of the two-piece key and let the gib hold it in place.

Q. Did he tell you how he proposed to get the key out?

A. I think he *told he* could drive a wedge under one end of it and lift it out.

Q. And lift it out with the wedge? A. Yes.

Q. Pry it out with the wedge? A. Yes.

Q. Drive a drift under it and pry it out with a wedge?

A. Raise it with the wedge and drive it out.

Q. Did you suggest making a key like that up there? A. I did not.

Q. Did he? [555—494]

A. He did not.

Q. Did you tell him you would like to see such a key? A. I did not.

Q. No reamer ever came up with such a key that was in response to the order he told you about?

(Testimony of August F. Adams.)

A. There did not.

Q. Did you make any inquiry why that order was not filled?

A. Why, he told me that Mr. Wilson would not make the reamer with that key in it, for some unknown reason.

Q. When did he tell you that?

A. That was the first time I saw him afterwards, in the fall.

Q. How long would it have taken you to make such a key in your shop at that time?

A. To make the actual key itself?

Q. Yes.

A. It would take about an hour and a half.

Q. And it could have been slipped on in place of the two-piece key, couldn't it?

A. I don't know whether it could or not. I have never taken that into consideration at all.

Q. Why, wasn't there a slot in the key-arm and two slots in the body so you could push the key on there? A. Yes, sir; there is.

Q. Nothing to interfere with getting it through, was there?

Mr. LYON.—Objected to as incompetent. The witness has stated he never considered the question before now.

Mr. BLAKESLEE.—I want him to consider it now.

The COURT.—I will overrule the objection. This is cross-examination.

A. Nothing to interfere with getting it through there.

(Testimony of August F. Adams.)

Q. (By Mr. BLAKESLEE.) Yes.

A. There was not; no; no. [556—495]

Q. When, after that, did you next think that such a key would be handy in a Wilson reamer?

A. I always thought it would be handy to have a key of that kind in there, on account of taking it apart.

Q. Didn't you have two-piece key Wilson reamers to repair up there after September, 1908?

A. Yes; we did.

Q. You never tried to put in a single-piece key in place of a two-piece key, did you? A. We did not.

Q. Why not?

A. It was not our business to fix them, only the way that they come.

Q. Didn't you make keys for reamers up there when you were repairing reamers?

A. We made the keys to replace the ones we drilled out.

Q. And you made such two-piece keys up there?

A. Yes, sir.

Q. After the time you say Mr. Bole described this one-piece key to you? A. Yes, sir.

Q. And yet you never made, up there, a one-piece key to take the place of such worn-out two-piece keys? A. We did not.

Q. Now, you never had to drill any two-piece keys out, did you? Wasn't it merely the plug that you had to extract?

A. We have had to drill out to the thin shell and then drive them out.

(Testimony of August F. Adams.)

Q. Had to drill the plug out?

A. Drill the plug and the key, also.

Q. Why was that?

A. On account of them rusting, and corroding in there. [557—496]

Q. That was because they had been left lying around in the rain?

A. Not on account of that. It was on account of it being so close a fit that if you started to drive the key the swelling would make it too large to go through the hole.

Q. That wouldn't be rust, but it would be upsetting the metal?

A. Upsetting the metal, yes, sir.

Q. How long was that chalk sketch on your lathe up there?

A. Why, it was probably five inches long, or such a matter.

Q. How long a time, I mean?

A. Oh, how long. Why, it was there probably ten minutes.

Q. And who rubbed it out?

A. Why, it naturally would rub out. A fellow working over the compound generally puts his arm on it, you know.

Q. You rubbed it out?

A. Yes; I rubbed it out.

Q. And that evening you went to town with your friend Bob and played pool with him, didn't you, in Maricopa? A. Yes, sir.

Q. And you didn't see him send an order off for a

(Testimony of August F. Adams.)

reamer that night, did you? A. No, sir.

Q. Didn't see him make out any? A. No, sir.

Q. Did you talk about a reamer that evening,

A. We did not.

Q. You didn't see him make out an order at all on that day or on that trip? A. I did not.

Q. Didn't tell you that he had made out an order when he came over to your lathe? [558—497]

A. He told me he had got an order.

Q. He did not at any time say he had written out an order, on that trip, did he?

A. He didn't say to me that he had written out an order.

Mr. BLAKESLEE.—That is all.

(By the COURT.)

Q. What kind of a lathe is that that this was drawn on?

A. It is a compound rest of a Reed & Shipley lathe.

Q. How long was the lathe?

A. The lathe was a 12-foot bed.

Q. How wide was the bed?

A. The bed was probably 24 inches wide.

Q. And was this drawing on the bed of the lathe?

A. It was on the compound rest on the carriage, which is probably 7 inches—7 by 12.

Q. Yes. Well, what kind of surface had the lathe? A. It has a smooth surface.

Q. Bright or dull?

A. It is dull, from laying the tools on them. It was originally bright.

Q. The surface, then, on which this chalk was

(Testimony of August F. Adams.)

drawn was not a surface that was used by metal running over it? A. No, sir, it was not.

Q. How came there to be a piece of chalk there?

A. We always have chalk at the lathe for truing up work.

Q. What was Mr. Bole doing there?

A. At Maricopa, or at the shop?

Q. No; at your lathe?

A. Oh, he come out of the office. My lathe was right at the office, and he had come out of the office, and was tickled on account of getting the order, it seemed like; and we were [559—498] working on under-reamers at that time, and he described this one single-piece key at that time right on the lathe.

Q. Well, when did you next think about that event?

A. It was owing to the fact that we did not get the reamer with the single-piece key, that I asked him probably the next time he came up.

Q. The firm you were working for were ordering this reamer? A. Yes, sir.

Q. And you asked him about it the next time he came up? A. Yes.

Q. And when did you next think about this chalk business?

A. I think that Mr. Bole brought it up to me the next summer, in 1910.

Q. In 1910? A. Yes.

Q. Before this lawsuit came up?

A. Yes; before the lawsuit came up.

Q. What was said on that occasion? Do you ob-

(Testimony of August F. Adams.)

ject to that question?

Mr. BLAKESLEE.—No, sir. Any inquiry your Honor wants to make.

Q. (By the COURT.) What was said on that occasion?

A. He told me that he thought he would get his reamer made after *awhile*, that is, with this key in it.

Q. Tell all that was said on that occasion?

A. He said he thought he would get the reamer made, with the key in, which we had talked about quite often. Around about that time we were doing under-reamer work extensively.

Q. What kind of work were you doing on under-reamer work then?

A. We were doing repairing in the field.

The COURT.—I believe that is all I wanted to ask. [560—499]

(By Mr. BLAKESLEE.)

Q. Let me ask if that was not a greasy lathe surface where the sketch was made?

A. Why, it naturally would become greasy, and would be wiped off in the course of events during the day.

Q. Did you use chalk in making calculations and figurings on that greasy surface?

A. Why, yes; we do.

Q. Will the greasy surface take the chalk all right?

A. Why, we always clean off the grease.

Q. First? A. Yes.

Q. Did Bob Bole clean off the grease before he made that sketch?

(Testimony of August F. Adams.)

A. It was not necessary. It happened to be clean.

Q. It happened to be clean, but he didn't clean it off? A. No.

Q. Did you make any other sketches on that lathe in chalk, about that time, or did anybody else?

A. Why, no, any more than we would just figure something on it.

Q. Do you remember anything you wrote on that lathe in chalk that year except this key sketch you saw Mr. Bole put on? A. I do not.

Q. Not a thing? A. No.

Mr. BLAKESLEE.—That is all.

Mr. LYON.—I now wish to read in evidence the deposition of Mr. R. L. Heber, taken in this case.

Mr. BLAKESLEE.—We oppose the consideration of that deposition, in any respect whatsoever, on the ground that if any such deposition was taken it was not done within the rules or under [561—500] the statutes; and admit that we had notice of the taking of such a deposition on the date upon which I suppose it purports to have been taken, but claim that that date was a date prior to the time when the cause was at issue, and Rule 31 inhibits the taking of any such deposition, under the new equity rules or under a statute, prior to the coming of a case to issue, particularly with respect to revised statutes, Section 863, which is the only section under which such deposition could be taken, generally, with the limitations imposed by sections 864, 865, et seq. (Reads.)

Mr. LYON.—We contend that this deposition was taken under sections of the revised statutes Nos. 863,

(Testimony of August F. Adams.)

865, 866, 867, and under Rule 54. On August 21, 1914, the notice of motion, and motion to strike out the alleged counterclaim was filed.

The COURT.—When was the answer filed?

Mr. LYON.—The answer was filed August 19, 1914, with a counterclaim therein. On October 28, 1914, Judge Bledsoe granted the motion to strike out the counterclaim from the answer, and that order was entered on October 28, 1914; and the case was then at issue on the bill and answer, under the equity rules. The notice of the deposition was given as recited in the deposition before your Honor.

Mr. BLAKESLEE.—More than sixty days after that time.

The COURT.—The notice was given February 11, 1915.

Mr. BLAKESLEE.—More than a hundred days after that time.

The COURT.—Now, when was the counterclaim stricken out?

Mr. LYON.—The 28th of October.

Mr. BLAKESLEE.—The 28th of October.

The COURT.—This seems to be an important matter. I will not rule on the matter of the objection to this deposition until to-morrow.

Mr. LYON.—With that deposition, we close our case in rebuttal. [562—501]

The COURT.—I understand there was no motion made to suppress this deposition?

Mr. LYON.—No.

(Testimony of E. C. Wilson.)

Mr. BLAKESLEE.—No. sir.

(Discussion.)

The COURT.—Proceed with your case, Mr. Blakeslee. [563—502]

**[Testimony of E. C. Wilson, for Defendants
(Recalled).]**

E. C. WILSON, recalled, testified on behalf of the defendants, as follows:

Direct Examination.

(By Mr. BLAKESLEE.)

Q. You are the defendant in this case who has previously testified, Mr. Wilson? A. I am.

Q. You have heard all of the testimony given by the witnesses for the complainants in this case?

A. Yes, sir.

Q. Mr. Bole, the complainant, testified as to several conversations had with you prior to January 27, 1911, with respect to a single-pieec key device. What have you to say as to any such conversations?

Mr. LYON.—We object, on the ground that that is not rebuttal. It has aldeady been gone over in the testimony of the witness. He denied he had any conversation with Mr. Bole in relation to it.

The COURT.—It will be shorter to let him deny it again, if he denies it. It won't hurt. Objection overruled.

A. I had no such conversation with Mr. Bole.

Q. (By Mr. BLAKESLEE.) Did you at any time prior to the making out of the order for the first Wilson reamer with the single-piece key device, dis-

(Testimony of E. C. Wilsop.)

cuss, at any time or at any place or in any manner, with R. E. Bole, the complainant, such single-piece key device?

Mr. LYON.—That is objected to as leading, and calling for the conclusion of the witness, and not—

The COURT.—He says he had no discussion with him at all. Why ask him any more questions about it?

Mr. BLAKESLEE.—I think that is probably sufficient.

Q. What have you to say as to the testimony of Mr. Bole in regard to any occasion upon which he attempted to remove a single-piece key device from a Wilson under-reamer at the shop of the [564—503] Wilson & Willard Manufacturing Company in the early part of 1911?

A. That was the first statement or information I have ever heard, or the first time it has ever come to my notice—

Mr. LYON.—We object to the form of the answer.

Q. (By the COURT.) Mr. Witness, you heard Mr. Bole and this man Mr. Naphas testify that you came up when they were together and this key was in that machine and you stated, according to the testimony, “Now, you have got it in. How will you get it out?” And Mr. Bole said, “Drive it out,” or words to that effect. Did that conversation occur?

A. It did not.

Q. Did you see Mr. Bole drive the drift in, as he called it, and drive the key out? A. I did not.

Q. Did you see that occurrence that Mr. Naphas

(Testimony of E. C. Wilson.)

testified about when he said you came up, and he was there and nobody else but Mr. Bole and Mr. Naphas and yourself?

A. I remember of no such an occurrence.

Q. Your idea is that no such thing occurred?

A. That is my recollection, yes, sir.

The COURT.—Now, you can ask him leading questions about these things these witnesses testified about. Get right at it and see what he says about it.

Mr. BLAKESLEE.—All right.

Q. Was there any such occurrence when Mr. Wilcox was present?

The COURT.—Are you trying to dispute Mr. Wilcox now?

Mr. BLAKESLEE.—No. This other witness said Mr. Wilcox was present on that occasion.

Mr. LYON.—Oh, he said he might have been.

Mr. BLAKESLEE.—Mr. Bole testified about that.

Mr. LYON.—It is the same occurrence.

A. No, sir; I don't remember of any such occurrence. [565—504]

Q. (By Mr. BLAKESLEE.) Now, at any time did Mr. Bole ever make a chalk sketch for you upon the floor, of such a single-piece key device as used in the Wilson under-reamer?

A. Not that I reemmber of.

Q. Mr. Bole has testified something about the production of rectangular springs in the Wilson under-reamer. Had any such rectangular springs been used in the Wilson under-reamer before that time?

A. Yes, sir.

(Testimony of E. C. Wilson.)

Q. When, and under what circumstances?

A. We had used them years before that, in 1906 and 1907; at least 1907 and 1908. I am sure as early as that they were used in the reamers, as we manufactured them in Bakersfield.

Q. I show you a blue-print and ask if you know anything about that?

A. Yes, sir. This is a blue-print of a working drawing of old-style slotted tee bar and Wilson under-reamer type—slotted tee bar type, and which drawings were made in Bakersfield.

Q. Is there any sort of a spring shown in that?

A. Yes, sir.

Q. What kind of a spring?

Mr. LYON.—We object. The blue print is the best evidence.

The COURT.—I don't see the importance of it at all.

Mr. BLAKESLEE.—We simply want to show by shop evidence that those rectangular springs were used in that shop before.

The COURT.—Go ahead.

A. This is the rectangular spring, and were the springs used in this reamer in Bakersfield.

Q. (By Mr. BLAKESLEE.) This coil at the lower right-hand portion of the drawing is the rectangular spring, is it?

Mr. LYON.—We object, on the ground that the blue-print speaks for itself. [566—505]

The COURT.—Yes.

Q. Does that show a rectangular spring?

(Testimony of E. C. Wilson.)

A. Yes.

The COURT.—All right.

Mr. LYON.—We don't deny that in Bakersfield they used the rectangular spring at that time, so far as that goes.

The COURT.—All right. Then there will be no necessity for this testimony.

Q. By Mr. BLAKESLEE.—How long and how late were such springs used?

A. We are still using them.

Q. At any time did you ever discontinue their use?

A. In certain sizes of reamers we possibly did.

Q. I show you Complainant's Exhibit "E," and ask you when you first saw that.

Mr. LYON.—What is that?

Mr. BLAKESLEE.—Bole Sketch.

Mr. LYON.—That is objected to as irrelevant and immaterial.

The COURT.—What is the difference? There is no claim that he ever had seen it, is there?

Mr. LYON.—We don't claim he ever saw it until it was produced.

The COURT.—Are you trying to prove a negative now?

Mr. LYON.—No, I want to show when he first saw it. That is positive.

Q. (By the COURT.) When did you first see it?

A. The day it was introduced in testimony.

Q. (By Mr. BLAKESLEE.) In the interference proceeding?

A. In the interference proceeding.

(Testimony of E. C. Wilson.)

Q. Did you ever see any order such as Mr. Bole has told us about which went through the pump department or any other of the departments of the Wilson & Willard Manufacturing Company in 1911 for making up a single-piece key such as we are discussing? [567—506] A. I did not.

Q. Have you endeavored, among the records of the defendant company, to determine whether there was any such order? A. I have.

Q. When? A. Recently.

Q. Now, Mr. Bole has testified that after he got back from Maricopa, in 1908, the latter part of September, he took up with Mr. Willard, then interested in your company, the question of this order for the reamer for the Sunset-Monarch Oil Company, with the single-piece key, and that Mr. Willard told him he had taken that matter up with you and you had refused to allow any changes to be made in the Wilson reamer. What have you to say as to this?

A. There was nothing of that sort done whatever. I was in Bakersfield, and heard nothing of it at all.

Q. Did you have any communications with Mr. Willard at that time about the work in your shop down here in Los Angeles?

A. Yes; we had correspondence practically every day.

Q. Did Mr. Willard at that time send you any paper, order, or other memorandum of any such order for such single-piece key device for the Wilson reamer? A. No, Sir.

Q. Mr. Bole has testified that he said to you, before

(Testimony of E. C. Wilson.)

you commenced making the Wilson single-piece key reamer, "Why don't you make the kind of key I told you about?" Didn't Mr. Bole ever ask you that question? A. He did not.

Q. Did you ever tell Mr. Bole at any time that you were afraid mud would get into the working parts of the reamer if the single-piece key was used, and would interfere with the operation of the reamer?

A. Not in connection with the key part of a reamer.
[568—507]

Q. Did you ever have any such trouble with the Wilson reamer? A. I never did.

Q. Did you ever know of any such trouble occurring in the field? A. I never heard of it.

Q. Did Mr. Bole, in your presence, ever drive a key into a Wilson reamer, other than this morning in the court here?

A. I believe that is the first time I ever saw Mr. Bole drive a key in a Wilson under-reamer—this morning, here, in this room.

Q. Do you recollect of his ever having done so?

A. Not to my recollection; no, sir.

Q. Did you ever see Mr. Bole lift up and drive a key out of a Wilson reamer?

Mr. LYON.—Object to that as being a mere repetition.

The COURT.—I think so. There is no claim he ever did so except on one occasion, and he has denied that occasion.

Mr. BLAKESLEE.—Question withdrawn.

Q. Mr. Bole testified that at the conference which

(Testimony of E. C. Wilson.)

took place when the Bole Pump Company account was settled, the 1st of February, 1913, that you asked him about the key matter and wanted to know if he would not throw in the key, this invention, in the settlement of that pump account, and he would not do it, that he simply refused to do so, and that Mr. Willard was then present. What have you to say as to this?

Mr. LYON.—We object to that, on the ground that it has already been gone over. This witness has given his version of that conversation.

The COURT.—He has a right to deny it categorically—that he stated that—if he wants to.

A. Mr. Bole made no such request.

Mr. LYON.—We move to strike out the answer from the record, [569—508] on the ground that it is not responsive.

Mr. BLAKESLEE.—We consent. Read the question.

(Question read by the reporter.)

Q. (By the COURT.) Did that occur or not?

A. It did not.

Q. Nothing of that kind was said?

A. Not in that line. I objected to putting the key matter in this agreement. He asked why it was not in there.

Q. You have told what occurred? A. Yes.

Q. (By Mr. BLAKESLEE.) Have you any knowledge or recollection of any act done by Mr. Bole in the shop of the Wilson & Willard Manufacturing Company, at any time, with respect to making a

(Testimony of E. C. Wilson.)

single-piece key for Wilson's reamer, and fitting it in the reamer?

Mr. LYON.—I object to that as leading. I think that is a mere repetition. He has been all over that question.

The COURT.—I think that is a repetition; but I will let him answer it.

A. Not unless the suggestion of prying the key out with a lever would be an "act" within that scope.

Q. (By Mr. BLAKESLEE.) That is all you recollect in that connection?

A. That is all I can recollect.

Q. Prior to that time had Mr. Bole ever mentioned to you the possibility of prying up a single-piece key and driving it out?

Mr. LYON.—We object to that, on the ground that it is a repetition.

The COURT.—I don't see any necessity of that question.

Mr. BLAKESLEE.—That is all.

Cross-examination.

(By Mr. LYON.)

Q. Mr. Wilson, you were in Los Angeles either in the latter [570—509] part of September of 1908 or the fore part of October, 1908, and at the place of business of the Wilson & Willard Manufacturing Company, were you?

A. I couldn't say definitely that I was.

Q. Will you state now that you were not?

A. There is nothing I can recall definitely that I was or was not.

(Testimony of E. C. Wilson.)

Q. To refresh your recollection, your brother, W. W. Wilson, had just at that time commenced work there, hadn't he, and was attempting to keep the books of account, and so forth?

A. It was some time in the summer or fall of 1908. I don't remember the exact date myself.

Q. Now, after producing the binder folio and order No. 709, of the Wilson & Willard Manufacturing Company bearing date September 18, 1908, and referring to the $9\frac{5}{8}$ inch under-reamer which was manufactured for and shipped to the Sunset-Monarch Oil Company on this order received by Mr. Bole, you were asked this question: "And in the last portion of your answer you have produced another book and referred to the binder folio No. 437, order received from Heber, Salesman, Bole. Have you any personal knowledge of this particular order?"

A. The only knowledge I have of it is the notation I have made in red pencil designating to what account the item should be credited. At that time I was instructing my brother, W. W., how to keep the accounts, and made that notation on the sheet itself. Aside from that, I know nothing about the sale, other than as it would ordinarily come to my notice on our records, at the time I made the notation. Q. 888. Do you know when you made this particular notation? A. Undoubtedly at the end of the month, just prior to the posting of the month's business." You gave that testimony, didn't you? A. Yes, sir.

Q. And was it true and correct, to the best of your recollection, at the time of giving it? [571—510]

(Testimony of E. C. Wilson.)

A. I know they were very much behind in their bookkeeping, and it might be possible that that was not posted until the first part of October.

Q. Well, the statement therein contained is true and correct to the best of your knowledge—

A. Yes.

Q. —that you assisted your brother in making the posting of that entry? A. That is right.

Q. And you must have been in Los Angeles, in order to do that? A. Yes, sir. I was here.

Mr. LYON.—That is all. [572—511]

[Testimony of Arthur G. Willard, for Defendants.]

ARTHUR G. WILLARD, recalled, testified on behalf of the defendants as follows:

Direct Examination.

(By Mr. BLAKESLEE.)

Q. You have testified previously in this case for the defendants? A. Yes, sir.

Q. Did you hear the testimony in this case of the complainant Robert E. Bole?

A. Part of it; the part that was given after two o'clock.

Q. During the month of September, 1908, do you remember any order of having been received by you or by the Wilson & Willard Manufacturing Company, the defendant, through you, from the complainant, Robert E. Bole, for an under-reamer?

A. Yes, sir.

Q. Where was Mr. Bole, if you know, when that order was sent in?

(Testimony of Arthur G. Willard.)

A. The order was sent in from Maricopa, California.

Q. How did the order come in?

A. Through the mail.

Q. Where did you receive that order?

A. At the shop of the Wilson & Willard Manufacturing Company.

Q. Didn't you receive it at your house?

A. No; I don't think so. It has always been my impression that I received the order at the office of the Wilson & Willard Manufacturing Company.

Q. What did that order call for?

A. Called for a $9\frac{5}{8}$ Wilson under-reamer, with an extra set of 10-inch cutters and Bole casing-spear and 12 Bole pumps.

Q. What?

A. 12 Bole oil well-pumps. [573—512]

Q. Now, what was that order as you received it? What did it look like?

A. Well, that is pretty hard for me to answer. It is a long time ago.

Q. What sort of a reamer did it call for in detail?

A. The order, as I remember it, called for a $9\frac{5}{8}$ inch Wilson under-reamer; and, in this letter or order that I received there was some mention of some change.

Q. Did that change relate to a single-piece key for the Wilson reamer?

Mr. LYON.—We object to that, on the ground that it is leading.

The COURT.—I will overrule the objection.

(Testimony of Arthur G. Willard.)

A. It has always been my impression that that change referred to the holding means.

Q. Was there any sketch in that order?

A. Not that I remember of.

Q. Have you any recollection of any sketch or any showing, other than the written part of the order, of what the reamer was to be?

A. Not definitely, no, sir.

Q. Can you tell us anything of that sort that you remember about that order?

A. No; nothing any more than I received the order for these different articles.

Q. How soon after you received this order was work commenced upon it?

A. Oh, to the best of my recollection, it was two or three days.

Q. Was there any delay incident to taking up that work that you remember?

A. Not that I know of, no, sir. [574—513]

Q. Did you communicate with Mr. E. C. Wilson, the defendant, about that particular reamer, in any way?

A. Not that I know of; no, sir.

Q. Do you recollect about communicating with him in any way?

A. No, sir, not definitely; no, sir.

Q. Have you any such recollection?

A. No, sir.

Q. Did you send Mr. Wilson that order, or any letter regarding it, or any telephonic message, or communication of any kind?

A. Not that I remember of. Now, I would not

(Testimony of Arthur G. Willard.)

state positively; but I don't think I did. I may have told Mr. Wilson—thinking it over afterwards, I may have told Mr. Wilson over the long-distance telephone that we had had an order or Mr. Bole had sent down an order.

Q. Do you remember anything about such a communication?

A. No; I don't remember anything about it. But I may have told Mr. Wilson over the long-distance phone that we had received an order from Mr. Bole for a $9\frac{5}{8}$ inch reamer. If I communicated with Mr. Wilson at all, it was over the long-distance telephone.

Q. When Mr. Bole returned from Maricopa after that trip did you discuss that order with him?

A. Yes; to a certain extent.

Q. Did you tell him that you had communicated with Mr. Wilson about that order and that Mr. Wilson refused to make any change in the reamer?

A. Not that I remember of.

Q. You have no recollection as to that?

A. None whatever.

Q. Did you tell him that the order would have to be filled with some other reamer than that that he had specified?

A. I told him the reamer would have to be shipped as a standard reamer. [575—514]

Q. Yes. And what reamer was shipped on that order? A. A standard $9\frac{5}{8}$ inch reamer.

Q. Was it different from any other reamer made in the factory? A. No, sir.

(Testimony of Arthur G. Willard.)

Q. Was any complaint received from the Sunset-Monarch Oil Company with respect to the nature of that reamer? A. Not that I remember of.

Q. (By the COURT.) What did you do with the letter and order?

A. Why, your Honor, it was filed away with the shipping order, to the best of my recollection.

Q. Down here in the Wilson & Willard Manufacturing Company's shop? A. Yes, sir.

Q. When did you last see it?

A. Not since 1908, that I remember of.

Q. Who has had charge of the records since then?

A. Why, at that time Mr. Wilson's brother was in the shop and acting in the capacity of bookkeeper, and he had charge of the records at that time.

The COURT.—Go ahead.

Mr. BLAKESLEE.—And have there been any losses that you know of, by fire or otherwise, of the records of the Wilson & Willard Manufacturing Company since the receipt of that order?

A. Not that I know of.

Q. Were there while you were with the company?

A. Not that I know of.

Q. Now, when was it, as a matter of fact, that you first saw any sketch of such a single-piece key device for such reamer?

The COURT.—I don't see the importance of that—when he saw it.

Q. (By Mr. BLAKESLEE.) You have known Mr. Wilson and Mr. Bole, both, intimately, for a good many years, haven't you? [576—515]

(Testimony of Arthur G. Willard.)

A. Yes, sir.

Q. Now, have you any established belief as to who was the originator of that single-piece key device of the Wilson reamer?

Mr. LYON.—I object to that on the ground that it is calling for the mere belief, and incompetent.

Mr. BLAKESLEE.—I will admit that is hardly within the straight rules of evidence; but I think that here is a witness who is peculiarly able to throw light upon this involved and entangled situation because of his intimate knowledge of both of these parties and his long experience with them, and who was present at that shop during all this long period which includes these various acts.

The COURT.—I believe if we were trying this case in France that would be proper evidence; but I don't think it is in America. I sustain the objection.

Q. (By Mr. BLAKESLEE.) Were you ever present in the shop of the Wilson & Willard Manufacturing Company when Mr. Bole attempted to get a key out of the Wilson reamer, that is, a single-piece key?

Mr. LYON.—Objected to as immaterial. There is no such claim. Not rebuttal.

The COURT.—Objection sustained.

Q. (By Mr. BLAKESLEE.) That is all.

The COURT.—Stand down.

Mr. LYON.—Just a question or two, your Honor, here now.

The COURT.—Isn't this largely covered by the

(Testimony of Arthur G. Willard.)

deposition of this witness which was taken and introduced in evidence?

Mr. LYON.—All except one question or two, and I will rely on the deposition for the rest of my cross-examination. [577—516]

Cross-examination

(By Mr. LYON.)

Q. You used the term here this afternoon that it was your recollection that in this order for the Sunset-Monarch reamer, sent down by Mr. Bole in September, 1908, there was either a sketch or some description of some change to be made in the holding means. What do you mean by “holding means” in that answer?

The COURT.—I didn’t understand that myself.

A. I mean by the words “holding means” the means that help to confine the spring within the body of the reamer.

Q. (By Mr. LYON.) And hold up the—

A. Tee bar.

Q. The spring actuation—

A. Hold up the tee bar.

(Adjourned until Saturday, March 27, 1915, at 10 o’clock A. M.) [578—517]

Saturday, March 27, 1915, 10 o’clock A. M.

The COURT.—In regard to this deposition, I will take the question submitted under advisement. I see that under Rule 46 there is an amendment there by which if the deposition is excluded it shall be put into the record for consideration by another court that might pass upon this matter. While I expect

(Testimony of Arthur G. Willard.)

to exercise an independent judgment when I come to decide the question, regardless of that method of procedure, nevertheless, in these equity cases, according to the practice, whether the deposition is excluded or admitted would probably not have the same effect as if it were an action at law. So I will take that under advisement and decide it prior to my final decision. You can argue it further, gentlemen, if you desire, at the time of the final argument in this case. You may in the meantime by industry find some further authority that will throw light upon the controversy. I am not satisfied with it. I will say, however, that I think the better practice in a case of this kind would be to make a motion to suppress the deposition. Then when the trial comes the people can be ready to proceed with the trial. I do not understand that there is any claim made here that there was not notice given of this. There is no claim that there was any statement made to the attorney for the plaintiff that the notice was insufficient until here at the very close of the plaintiffs' case, and I don't think that it is a practice to be commended in a court of equity. You may call your next witness, Mr. Blakeslee.

Mr. BLAKESLEE.—I wish to recall Mr. Houriet for one or two brief questions. [579—518]

[**Testimony of A. W. Houriet, for Defendants
(Recalled in Rebuttal).]**

A. W. HOURIET, previously sworn and examined, being recalled by defendants in rebuttal, testified as follows:

Direct Examination.

(By Mr. BLAKESLEE.)

Q. You have previously testified in this case for the defendant? A. Yes, sir.

Q. Have you been able to find any memorandum or sketch, or the like, which would refresh your recollection as to how the slot was drilled through the tee bar in the first reamer 120?

Mr. LYON.—If your Honor please, we object to this as not sur-rebuttal.

The COURT.—It seems to me like you went into that.

Mr. LYON.—He has been all over that.

Mr. BLAKESLEE.—He has found new evidence—a sketch which shows definitely just what was done as to that; verifies that. That is the only reason.

The COURT.—Oh, you mean to clarify it?

Mr. BLAKESLEE.—That is the only reason.

A. Yes, I have. (Witness produces a sketch.)

Q. Did you make that sketch? A. Yes, I did.

Q. And when?

A. At the time I drilled the tee bar.

Q. For this reamer 120? A. Yes, sir.

Q. What does it show as to the way in which the slot was placed?

Mr. LYON.—We object on the ground that it is

(Testimony of A. W. Houriet.)

incompetent. The sketch will speak for itself.

The COURT.—Yes; the sketch will speak for itself. [580—519]

Q. (By Mr. BLAKESLEE.) Now, from so refreshing your recollection how was the slot drilled through that tee bar with respect to any angle to the ears that hold the cutters?

A. It was drilled through the—

The COURT.—Louder, please. I can't hear you.

A. It was drilled opposite from the way the ears are on the tee bar.

Q. (By the COURT.) At right-angles to the ears on the end of the tee bar?

A. Yes, sir, at right-angles.

The COURT.—All right.

Q. (By Mr. BLAKESLEE.) And that agrees, does it, with the showing of this sketch?

The COURT.—Wait a minute. That sketch shows for itself.

Q. (By Mr. BLAKESLEE.) And then what did you do as to drilling the body of that reamer?

Mr. LYON.—We object to that on the ground that it has all been gone over and it is mere repetition.

The COURT.—Yes.

Q. (By Mr. BLAKESLEE.) You have nothing further to say as to drilling the body?

Mr. LYON.—We object on the ground it is not rebuttal.

The WITNESS.—The only thing I have on the drilling of the body—

The COURT.—The objection is sustained.

(Testimony of A. W. Houriet.)

Mr. LYON.—The only matter that is material is to test the reliability of the witness' memory, anyway.

Mr. BLAKESLEE.—That is all.

Mr. LYON.—That is all.

The COURT.—Yes. Mr. Houriet, you may remain. I may want to interrogate you further in this case.

Mr. BLAKESLEE.—We offer in evidence the sketch just produced by the witness as "Defendants' Exhibit Houriet Sketch."

(Marked Exhibit 13.) [581—520]

The COURT.—Proceed, Mr. Blakeslee.

[Testimony of E. F. Grigsby, for Defendants (in Rebuttal).]

E. F. GRIGSBY, called and sworn as a witness on behalf of defendants, testified in rebuttal as follows:

Direct Examination.

(By Mr. BLAKESLEE.)

Q. Please state your full name, age, residence and occupation.

A. E. F. Grigsby; thirty-six years old; foreman in the repair shop department of the Ford Motor Company.

Q. You reside in Los Angeles? A. Yes, sir.

Q. Did you at one time work for the defendant Wilson & Willard Manufacturing Company?

A. Yes, sir.

Q. When did you quit that connection?

A. It was sometime in December, 1911, as near as I can recollect.

(Testimony of E. F. Grigsby.)

Q. You have no business relations with the defendant company now or with Mr. Wilson?

A. No, sir.

Q. I show you Defendants' Exhibit "E" in this case, and ask you if you have ever seen it before, and, if so, when?

A. The first time that I ever remember seeing this was in Mr. Lyon's office, as near as I can recollect.

Q. You mean the attorney for the complainant?

A. Yes, sir.

Q. When was that?

A. I don't know the exact date; it was several months ago, I know.

Q. At the time Mr. Lyon was taking testimony for Mr. Bole in an interference case?

Mr. LYON.—September 24, 1914.

A. Yes, sir. About that time.

Q. (By Mr. BLAKESLEE.) How did you come to see it then? [582—521.]

A. I believe Mr. Lyon showed it to me there.

Q. Had you ever seen it before?

A. Not to the best of my recollection.

Q. Did you ever witness anything for Robert E. Bole, the complainant, on tracing linen?

Mr. LYON.—We object to that.

The COURT.—The question is whether he witnessed that, to get it straight as rebuttal.

Mr. BLAKESLEE.—Yes, sir.

The COURT.—Get at it directly.

A. Not that I remember of. I don't remember ever signing tracing paper. I never had any occa-

(Testimony of E. F. Grigsby.)

sion to use it and I don't remember of ever signing it on tracing paper for anyone.

Q. (By Mr. BLAKESLEE.) Did you ever discuss with Mr. Bole or did Mr. Bole ever talk to you about anything such as you can make out from that sketch?

Mr. LYON.—That is objected to as calling for a conclusion of the witness.

The COURT.—I will let him answer it.

A. Not that I remember of.

Q. (By the COURT.) Is that your name on there? A. Yes.

Q. Did you sign it?

A. Not to my knowledge.

Q. What is your best opinion about it?

A. It looks like my handwriting, but I don't ever remember of signing it.

Q. And you say your idea is that you did not sign it because you don't remember to have signed it?

A. It looks like my writing, all right, but I don't remember of ever signing my name on tracing paper. I don't remember of any time in my life that I ever did use tracing paper for any reason.

Q. Is that the way you usually sign your name?
[583—522]

A. Yes, sir. I sign it a little different now.

Q. That is the way you signed it at that time?

A. Yes, sir. I hardly ever sign my name exactly the same. Sometimes I run all the letters together and sometimes I don't. It is according to the way I start out.

(Testimony of E. F. Grigsby.)

The COURT.—Go ahead.

Q. (By Mr. BLAKESLEE.) Is that the way you would sign your signature on a surface the size of that exhibit?

Mr. LYON.—That is objected to.

The COURT.—He has already testified and covered that question.

Mr. BLAKESLEE.—He says he would sign his signature at different times and under different circumstances differently.

The COURT.—Well, get at it then.

A. Well, on a piece of paper of that size a person would naturally write his name smaller, I should judge.

Q. (By Mr. BLAKESLEE.) And would you?

Mr. LYON.—Objected to as merely calling for a conclusion and leading.

The COURT.—I think so. The objection is sustained.

Mr. BLAKESLEE.—That is all.

Cross-examination.

(By Mr. LYON.)

Q. You appeared at my office in the interference proceedings in response to a subpoena of this court served upon you, didn't you? A. Yes, sir.

Q. You had no talk with me until you were put on the stand? A. With you?

Q. Yes. A. No, sir.

Q. And you were presented with this sketch "Complainants' Exhibit E" and asked if you had ever seen it before? A. Yes, sir. [584—523]

(Testimony of E. F. Grigsby.)

Q. And didn't you in that proceeding testify that you would not state positively that you did not on January 27, 1911, see Mr. Bole make this sketch and at his request witness it? A. No, sir.

Q. You didn't so testify?

A. Not that I remember of.

Q. Will you testify now positively that you did not on January 27, 1911, see Mr. Bole make this sketch and sign it as a witness at his request?

Mr. BLAKESLEE.—We object to the question unless the testimony is shown to the witness.

The COURT.—Well, he is asking an entirely different question now. The objection would have been good to the other question; not good to this. Objection overruled. (The question is read.) That is a fair question.

A. I don't remember it.

Q. (By Mr. LYON.) Will you state positively that you did not? That is the question.

The COURT.—I did not understand that he did not state that he did not. Is that right, Mr. Witness?

A. Yes, sir.

Q. (By Mr. LYON.) Then, your testimony summed up is that you have no recollection, that is all? A. I don't remember it at all.

Q. You have no recollection of the matter whatever, that is all? A. No, sir.

Q. You have testified in regard to this sketch twice heretofore, have you?

(Testimony of E. F. Grigsby.)

A. Yes, sir; I believe it is twice that I have been called on it.

Mr. LYON.—That is all. [585—524]

[**Testimony of W. H. Fahnestock, for Defendants
(Recalled).**]

W. H. FAHNESTOCK, recalled for defendants, testified as follows:

Direct Examaination.

(By Mr. BLAKESLEE.)

Q. You testified before in this case for the defendants, didn't you? A. Yes, sir.

Q. I show you Complainants' Exhibit "E," an exhibit in this case, and ask you if you know anything about it. (Showing.)

Mr. LYON.—I object to the form of the question.

Mr. BLAKESLEE.—I suppose it is leading.

The COURT.—Overruled. Go ahead and answer the question.

A. The first time that I have any knowledge of seeing this sketch was in Mr. Blakeslee's office.

Q. (By Mr. BLAKESLEE.) Under what circumstances and when?

A. When I was called upon to testify in the case regarding this patent.

Q. You mean in the interference proceeding in which we were taking testimony last fall between Mr. Wilson and Mr. Bole?

A. I believe that is what you termed it, the interference proceeding.

(Testimony of W. H. Fahnestock.)

Q. That is the first time you ever saw that sketch?

A. To the best of my knowledge, it is.

Q. Did you ever at any time sign your name on a piece of tracing linen for Mr. Robert E. Bole, the complainant?

Mr. LYON.—We object to that as leading.

The COURT.—The question is whether he ever signed that document.

Mr. BLAKESLEE.—I was following the line of your Honor's question to his previous signature in connection with Grigsby. I thought that line was permissible if he ever signed, to show beyond a doubt as to whether he ever signed any— [586—525]

The COURT.—All right, ask him.

Mr. BLAKESLEE.—Did any such physical act?

A. That I couldn't say.

Q. (By the COURT.) Did you sign this instrument—this document?

A. I don't think that I did.

Mr. LYON.—We move to strike the answer from the record as not responsive.

The COURT.—Overruled. Denied. You don't think you signed? A. No, sir.

Q. (By the COURT.) Were you working there on that day in the shop?

A. Yes, sir; I went to work there in September, 1910.

Q. And knew Bole at that time?

A. Yes, sir. I saw him there, I think, the first

(Testimony of W. H. Fahnestock.)

day I worked there.

Q. What makes you think you didn't sign it?

A. Well, in signing sketches I would recall the thing if I was to see it afterwards.

Q. You think you would recall it? Is that like your signature? A. Yes, sir.

Q. The way you would sign it?

A. Yes, sir.

The COURT.—Take the witness.

Q. (By Mr. BLAKESLEE.) If you were to sign on a surface of that size you would sign in that manner?

Mr. LYON.—Objected to as merely hypothetical and leading, and it has already been shown that this piece of paper was larger.

Mr. BLAKESLEE.—It has not been shown.

The COURT.—I will overrule the objection. Let him answer.

A. I have made a study of my signatures for back as far as [587—526] ten years, since this case came up, and I find that the smaller the paper I signed, naturally I crowd my signature.

Q. (By Mr. BLAKESLEE.) Your signature runs smaller on surfaces that are larger than this, does it?

Mr. LYON.—We object to that as not the best evidence and a mere conclusion of the witness.

Mr. BLAKESLEE.—The witness knows how he signed his signature, and we want to know.

The COURT.—The objection is sustained.

Q. (By Mr. BLAKESLEE.) What has been your practice, from the specimens of signature that

(Testimony of W. H. Fahnestock.)

you have looked over, where you signed on a surface of this size or smaller?

Mr. LYON.—That is objected to as secondary evidence, and no foundation laid for it.

The COURT.—The objection sustained.

Q. (By Mr. BLAKESLEE.) Are you dependent on your salary from the Wilson & Willard Manufacturing Company for your maintenance of yourself and your family?

Mr. LYON.—Objected to as irrelevant and immaterial.

The COURT.—The objection is sustained.

Mr. BLAKESLEE.—That is all.

Mr. LYON.—Mr. Fahnestock—

Mr. BLAKESLEE.—Just a moment. There is another point I wish to touch on. Will you produce a record of the Wilson & Willard Manufacturing Company which shows the charges to the Bole Pump Company account or to the Bole Pump Company or Robert E. Bole on all items during the year 1911?

Mr. LYON.—Objected to as leading and calling for a conclusion. I don't see the purpose of such evidence.

Mr. BLAKESLEE.—We wish to show as to the pumps Mr. Naphas told us about yesterday—as to whether any such pumps were made in that shop during that year. Mr. Naphas stated specifically that [588—527] certain pumps were made in 1911.

The COURT.—And your purpose is now to examine the books and to show that there were no such

(Testimony of W. H. Fahnestock.)

charges to that effect?

Mr. BLAKESLEE.—We wish to show that there were no charges for work made to Mr. Bole or to the Bole Pump Company in the year 1911 on any such pumps as Mr. Naphas told us about, and thereby prove that no such pumps were made in that shop during that year. It is square rebuttal.

The COURT.—I think it is a collateral matter, anyhow; I will sustain the objection to it. You are attempting to prove a negative by what is not in the book. You can show what is in the books, but you can't expect the Court to examine the books to find out that there is not something in it—that certain things are not there.

Mr. BLAKESLEE.—He can show from this book the first time that such pump was made, and that squarely rebuts Naphas as to the date upon which he said such pumps were first made.

The COURT.—That would only show what the books show as to when the first pumps were made, as appears from that book. It would not show that the books did not have a charge at some other time.

Mr. BLAKESLEE.—We will ask the witness if that book shows all the charges for that period to that Pump Company and then to show the first date that any such charge was entered.

The COURT.—I will let you ask the witness if there were any such pumps made in there at any time, and then he can state what his information is on it.

(Testimony of W. H. Fahnestock.)

Mr. BLAKESLEE.—Do these books show charges—

The COURT.—I won't permit that.

Q. (By Mr. BLAKESLEE.) Do you know when the first charges were made to the Bole Pump Company for 4 and 4½ inch pumps?

Mr. LYON.—We object to that. [589—528]

The COURT.—Objection sustained. Does this witness know anything about—

Q. (By Mr. BLAKESLEE.) Do you know anything about the manufacture of pumps for the Bole Pump Company at the shop of the Wilson & Willard Manufacturing Company?

A. Yes, sir; when I went there, and sometime afterwards, there was machinery on one side of the house, although their operations were not confined particularly to those machines. But those boys over there were known as the "pump crew." They worked on Bole pumps. Those pumps were used for oil wells.

Q. (By Mr. BLAKESLEE.) And did you have anything to do with keeping the account of material and labor supplied to that department?

Mr. LYON.—We object to that as immaterial.

The COURT.—Sustained.

Mr. LYON.—It is to the making that we want, isn't it?

The COURT.—That is what the Court ruled.

Q. (By Mr. BLAKESLEE.) What do you know as to the first making of pumps for that department?

(Testimony of W. H. Fahnestock.)

Mr. LYON.—We object to that on the ground that it is incompetent; no foundation laid.

The COURT.—If the witness knows he may answer.

A. We were making pumps there when I went there, and orders came in at various times for different size pumps.

Q. (By Mr. BLAKESLEE.) Do you know when the first 4½-inch pumps were made in that department?

Mr. LYON.—Objected to as leading. It is not shown—

The COURT.—Overruled.

A. I only know from the records in that book.

Q. (By Mr. BLAKESLEE.) Can you tell us by referring to those records?

Mr. LYON.—We object to that on the ground that it is irrelevant, [590—529] immaterial, incompetent, and the man himself has no knowledge of the making at all.

The COURT.—This witness does not seem to know anything about it except from the books. It would be secondary evidence when he got it and put it in the books, if he kept the books. I think it is secondary evidence. You can ask somebody that knows about the pumps, if you want to contradict that, somebody in charge of the pump department.

Q. (By Mr. BLAKESLEE.) You don't know anything further, then, as to the date when those 4½ inch pumps were first made in that department?

Mr. LYON.—We object on the ground that this

(Testimony of W. H. Fahnestock.)

witness has not shown that he knows anything about the making of any pump.

The COURT.—I will overrule the objection.

(Last question read by the reporter.)

A. The 4 and 4½ inch pumps were rather an odd size. I think they were used for pumping water instead of oil.

Q. (By the COURT.) Do you know whether any such pumps were manufactured there?

A. Yes, sir.

Q. When were they first manufactured according to your best information.

A. I would have to refer to the record there.

Q. Haven't you already referred to it? Haven't you been examining those records? A. Yes, sir.

Q. Haven't you got any mememory now about it?

A. I marked the place there in the book.

Q. And you don't know when the first ones were manufactured?

A. According to the record there I believe it is 1911, in February.

Q. In February, 1911? [591—530]

A. Yes, sir.

Q. Well, now—

A. I won't say positively whether it was 1911 or '12, because I only had a short time to look through that book. It is quite a job.

United States
Circuit Court of Appeals

For the Ninth Circuit.

Transcript of Record.
(IN THREE VOLUMES.)

WILSON AND WILLARD MANUFACTURING
COMPANY and ELIHU C. WILSON,
Appellants,

vs.

ROBERT E. BOLE and EDWARD DOUBLE,
Appellees.

VOLUME III.
(Pages 673 to 904, Inclusive.)

Upon Appeal from the United States District Court for
the Southern District of California,
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(Testimony of W. H. Fahnestock.)

Q. So you have not examined the book, then, thoroughly?

A. I examined it. I went through it twice thoroughly. I worked last night on it and also this morning, and I marked the place.

Mr. LYON.—I don't think there is any foundation for the witness' testimony whatever.

Q. (By the COURT.) Did you keep that book?

A. I was one of the office force that kept it.

Q. Who superintended the keeping of the books?

A. Mr. E. C. Wilson, or, at that time, W. W. Wilson gave me as many orders on the bookkeeping as anybody else. He was in charge of the books when I went there.

The COURT.—Well, I think this witness, Mr. Blakeslee, has told us all he can tell about it.

Mr. BLAKESLEE.—We will put on others on that point. That is all.

The COURT.—All right. [592—531]

Cross-examination.

(By Mr. LYON.)

Q. Now, Mr. Fahnestock, returning to this sketch here; you have testified twice in regard to this, haven't you, heretofore?

A. I think I have testified twice or three times.

Q. Now, will you state positively that you did not on January 27th, 1911, write your name W. H. Fahnestock, on Plaintiffs' Exhibit "E," as a witness, at the request of Mr. Bole?

A. I wouldn't state positively, but down in my own

(Testimony of W. H. Fahnestock.)

heart I feel that I never signed that document as it stands there.

Q. Have you any recollection of the circumstances at all? A. No, sir.

Q. One way or the other? A. No, sir.

Q. That is your signature on there, isn't it?

A. I believe it is.

Q. Now, you were out of California for a while this fall, back east, weren't you?

A. I was out of the State about ten days.

Q. And when you came back, Mr. Wilson or Mr. Blakeslee told you that they wanted you as a witness in this interference, didn't they?

A. Well, some of them did; I don't remember who it was.

Q. And they showed you either this sketch or a photographic copy of it, didn't they (handing to witness)? A. Photographic copy.

Q. And told you that they thought the signatures were forgeries, didn't they?

A. Well, it was lying on the desk in Mr. Blakeslee's office before the notary in charge of the case, and we were all looking at it.

Q. Well, wasn't that the talk, that they thought that your [593—532] signature was forged on that instrument?

A. They thought that the signature was forged or that there was some kind of fake about it.

Q. Now, after having that talk with them, you came to my office, didn't you? A. I did.

Q. To find Robert E. Bole? A. Yes, sir.

(Testimony of W. H. Fahnestock.)

Q. And you made three or four trips to my office to reach Mr. Bole, didn't you?

A. I think it was two, Mr. Lyon.

Q. And then you telephoned and requested Mr. Bole to come out to your house? A. Yes, sir.

Q. And you have no recollection whatever in regard to it? A. No, sir.

Q. Did you attempt at any time to deny that this was your signature on this Complainants' Exhibit "E"?

A. No, I don't know as I have attempted to deny that this was my signature.

Mr. LYON.—That is all.

Redirect Examination.

(By Mr. BLAKESLEE.)

Q. You have stated that you were trying to find Mr. Bole last fall before testifying; did you find him? A. Yes, sir.

Q. And you had a certain conversation with him that evening at your house? A. Yes, sir.

Q. And that was at 6647 Selma Avenue, Los Angeles, California?

A. Selma Street. [594—533]

Q. On what date?

A. It was the early part of October; I don't remember the date.

Q. October 7th, 1913, was it?

A. It was about that date.

Q. Now, at that time and place did he say to you in response to your question that at the time he showed you this sketch we have been discussing, all

(Testimony of W. H. Fahnestock.)

he said was that he wanted you to witness it?

Mr. LYON.—We object to that on the ground that it is not the same question that was asked Mr. Bole.

The COURT.—Objection sustained. Ask him directly a leading question as to what was said about that instrument by Mr. Bole.

Q. (By Mr. BLAKESLEE.) What was said then at that time by Mr. Bole as to what he had previously said to you at the time he had shown you this sketch?

A. I was sitting in my front room with a number of check stubs before me, examining the signatures when he came and—

The COURT.—Talk louder, please.

A. I was sitting at a table examining a number of checks when Mr. Bole came, and I told Mr. Bole that I had been called upon to testify, and that I couldn't remember anything about the signature, and asked him if he could tell me where it was signed in the shop, or give me something in connection with it whereby I could remember the incident of signing it; and he said no, he didn't know as he could, it had been quite a while ago and there were several places around there where you could sign things, and then he said that it was at the big bookkeeper's desk—that would mean my desk in the office. And I asked him two or three times about the signing of it, and he said he had made it out in the other room and brought it in there and asked me to witness it; and I asked him if it was the same then as it was at the present time, and Mr. Bole said, "Yes; it is just the

(Testimony of W. H. Fahnestock.)

same; it hasn't been changed any." [595—534]

The COURT.—Can't you talk a little louder? Everybody in the room is on a strain to hear what you say. Go ahead.

A. Well, that was about the substance of the conversation of the evening. We talked about various things.

The COURT.—Well, that is all we want to know, just about this signature. Anything else, Mr. Blakeslee?

Mr. BLAKESLEE.—That is all.

Recross-examination.

(By Mr. LYON.)

Q. You testified in regard to this same conversation in the preliminary examination of Mr. Bole in Justice Forbe's Justice Court of Los Angeles county when Mr. Wilson had Mr. Bole arrested for alleged forging of this same Complainants' Exhibit "E," did you? A. Yes, sir.

Q. And in that hearing Mr. Bell, the deputy district attorney, asked you the following question: "Q. Mr. Fahnestock, what was your object in going out to see Mr. Bole or having him come out to see you at the time you testified in your cross-examination?" And you answered, "A. In September I had been called east; I was told when I returned to the office that Mr. Bole—cited that lawsuit in progress, and summoned me as a witness, and I wanted to know of Mr. Bole if he could give me any information regarding the drawing whereby I could recall or brush up my memory of it, and he wouldn't do it." Did

(Testimony of W. H. Fahnestock.)

you give that testimony? A. Yes, sir.

Q. Was that your best recollection at that time?

A. Yes, sir.

Q. Now, Mr. Fahnestock, you stopped Mr. Bole on Santa Fe Avenue along in June, 1914, and asked him if he had any sketches that you had witnessed for him, didn't you? A. No, sir. [596—535]

Q. You had a conversation with him at the time didn't you? A. That is correct.

Q. And at your request he showed you your signature on something, didn't he?

A. It looked like my signature; I was standing two or three feet away.

Mr. BLAKESLEE.—Objected to, and ask that the answer be stricken out as not responsive to the question.

The COURT.—Read the question and answer.

(The last question and answer are read by the reporter.)

The COURT.—I think it is responsive.

Mr. BLAKESLEE.—He didn't state that it was at the request of Bole.

Q. (By Mr. LYON.) Will you state positively that it was not this signature, "W. H. Fahnestock" on Complainants' Exhibit "E" that he showed you at that time?

A. No, sir; I have no way of knowing.

Mr. LYON.—That is all.

Mr. BLAKESLEE.—And after—

The COURT.—Stand down, now. We have gotten out of this witness all the facts which are possible for him to give. [597—536]

[**Testimony of W. W. Wilson, for Defendants
(Recalled).]**

W. W. WILSON, recalled by the defendants, testified as follows:

Direct Examination.

(By Mr. BLAKESLEE.)

Q. You have testified previously for the defendants in this case, have you not? A. Yes, sir.

Q. Do you know who was in charge of the office of the Wilson & Willard Manufacturing Company in 1911? A. Yes, sir.

Q. Who? A. Myself.

Q. Do you know whether any 4½ inch pumps were ever made for Mr. Bole or the Bole Pump Company at the Wilson & Willard Manufacturing Company's shop, the shop of the defendants?

Mr. LYON.—We object to that as grossly leading, incompetent, and no foundation laid.

The COURT.—Objection overruled.

A. No, sir, there were no pumps, 4½ inch size, made in the year 1911.

Q. (By Mr. BLAKESLEE.) Were there any made at any time at your shop for the Bole Pump Company or Mr. Bole?

Mr. LYON.—Same objection and exception.

A. Not to my knowledge, no 4½ inch pumps were ever made in the shop for Mr. Bole.

Q. (By Mr. BLAKESLEE.) At no time?

A. At no time.

Q. Do you know who entered up orders received by the Wilson & Willard Manufacturing Company

(Testimony of W. W. Wilson.)

in the year 1908? A. I did.

Q. At that time did you enter up any order for anything to be shipped to the Sunset-Monarch Oil Company, Maricopa, California? [598—537]

A. Yes, sir.

Q. On what date?

A. On September 18th I entered up an order for—

Mr. LYON.—Now, if your Honor please, let me interrupt the witness a moment. If counsel will concede that their time-books show that Mr. Bole was absent from the Wilson & Willard shops from September 12th to September 20th, 1908, I won't object to this question on the ground that it is secondary evidence; in other words, they must either produce all their records here, or none of them.

Mr. BLAKESLEE.—I don't think we have to concede anything; we are producing the best evidence.

Mr. LYON.—We object on the ground it is not the best evidence.

Mr. BLAKESLEE.—We will produce the order, and the witness said he entered it up.

Mr. LYON.—Where is the order?

Mr. BLAKESLEE.—We are going to produce the order for it, the shop record order, and this witness will tell what the order was before he refers to it.

The COURT.—Where is the order? Let's see it right now. You are beating around the bush here too much. Let's get at this thing. Now, what is this order you are showing?

The WITNESS.—This is order Number 708 for sales to the Sunset-Monarch Oil Company, Hazelton,

(Testimony of W. W. Wilson.)

California, one 9 $\frac{5}{8}$ reamer for Diamond B. X. Cas-
ing.

The COURT.—3 by 4 by 7 pin, 300. Now, is that
what you want to show by that answer?

Mr. BLAKESLEE.—Yes, sir.

The COURT.—What other entry do you want to
show?

Mr. BLAKESLEE.—Order 708.

The WITNESS.—Order 709, that is dated 9-18;
order Number 708 is dated 9-18-08. [599—538]

The COURT.—Go ahead.

The WITNESS.—The next order is dated 9-19-
08, Sunset-Monarch Oil Company, Order Number
713, one 10 inch Bole spear.

The COURT.—How do you make out that is the
next order?

The WITNESS.—That is the next order in the
filing rotation.

The COURT.—Oh, 437, 438.

A. 438.

Q. That shows the credit to R. E. Bole; is that
right? A. Yes, sir.

Q. And this 708 is credited— A. To E. C. W.

Q. E. C. W. Who is E. C. W.?

A. Mr. E. C. Wilson.

Q. (By Mr. BLAKESLEE.) What does that
mean, "credit E. C. W."?

A. These sales orders are debited up to the ac-
count, and the credit for this amount goes to the
credit of Mr. R. E. Bole or E. C. Wilson.

(Testimony of W. W. Wilson.)

Q. (By Mr. LYON.) E. C. Wilson meant the reamer account?

A. Yes, sir.

The COURT.—What else do you want in here?

Mr. BLAKESLEE.—That is all, I think.

The COURT.—All right.

Q. (By Mr. BLAKESLEE.) Mr. Wilson, from whom did you receive instructions to enter up this order?

The COURT.—Which order are you talking about now?

Mr. BLAKESLEE.—Order 708 in that book.

A. Mr. Willard gave me those instructions.

Q. Mr. Arthur G. Willard, of that company?

A. Yes, sir.

Q. What did he say to you in giving those instructions? A. I don't remember.

Q. Did he give you any special instructions that you know of? [600—539]

A. Nothing particular any more than is usually given.

Mr. BLAKESLEE.—That is all.

Cross-examination.

(By Mr. LYON.)

Q. In the interference proceeding you were asked the following question: "Q. 444. Are you able to state of your own knowledge that the Wilson & Willard Manufacturing Company did not receive from Mr. Robert E. Bole, from Maricopa, California, an order to ship to the Sunset-Monarch Oil Company at Maricopa a $9\frac{5}{8}$ inch under-reamer and Bole casing

(Testimony of W. W. Wilson.)

spear, and an extra set of 10-inch Wilson cutters, such order being in writing and received by the Wilson & Willard Manufacturing Company by mail?

A. I don't remember of any such order being received." "A. No, sir; the Wilson & Willard Manufacturing Company did not receive any such order in writing."

A. That is correct; that is my memory of it, too.

Q. "Q. 447. If any such order had been received by the Wilson & Willard Manufacturing Company during September, 1908, from Mr. Robert E. Bole, ordering such under-reamer and spear shipped to the Sunset-Monarch Oil Company at Maricopa, California, you are certain you would have seen it, are you?"

A. "Yes, sir, as I wrote up the order." Now, I don't want to take time, Mr. Wilson; you have read over your testimony doubtless two or three times; I will ask you this further question; didn't you in this same deposition testify that you entered up this order for the under-reamer after Mr. Bole had returned, and on his verbal order?

Mr. BLAKESLEE.—Show him the testimony.

Mr. LYON.—I will take time to do it if he doesn't remember it. I want to save time.

A. I don't remember as to that. However, on checking the [601—540] matter up in regards to the dates, I am unable to place where Mr. Bole got back prior to the 20th of the month; these orders being entered up on the 18th or 19th, I must have gotten this order from Mr. Willard, because there

(Testimony of W. W. Wilson.)

was no other party there from whom I could have gotten it, in authority, to give the orders so I would write it up.

Q. So the records of the shop show that Mr. Bole was absent from September 12th to September 20th, 1908, do they? A. Yes, sir.

Mr. LYON.—That is all.

Mr. BLAKESLEE.—That is all. [602—541]

[Testimony of A. G. Willard, for Defendants
(Recalled).]

A. G. WILLARD, recalled by the defendants, testified as follows:

Direct Examination.

(By Mr. BLAKESLEE.)

Q. You previously testified for the defendants in this case? A. Yes, sir.

Q. You have heard the testimony just given by Mr. W. W. Wilson as to the receipt and entering up of this order 708? A. Yes, sir.

Q. Do you know anything about the work that was done on filling that order?

A. I know that the work was completed in the shop of the Wilson & Willard Manufacturing Company.

Q. Who was in charge of the shop at that time?

A. I was in charge—

Mr. LYON.—If your Honor please, this man has been all over this twice; he has been recalled on this particular question.

Mr. BLAKESLEE.—We propose to have it iden-

(Testimony of A. G. Willard.)

tified by shop records and his own testimony how soon this work was commenced. The question was raised whether he communicated with Mr. Wilson before he commenced work on this order.

The COURT.—Why didn't you put it in at the time?

Mr. BLAKESLEE.—I want to put in this further piece of evidence, that is all. Of course it was available, but the witness didn't advert to it. I will be very brief, your Honor.

Mr. LYON.—He has been here all the time.

The COURT.—Overruled. Go ahead and get at it quickly.

Q. (By Mr. BLAKESLEE.) When was the first piece of work done on that order in the shop?

A. Now, these shop orders refer to order Number 709?

Q. Yes, and what connection has that with order 708?

A. Well, it says for a $9\frac{5}{8}$ reamer. [603—542]

Q. Yes. Was there any other reamer at that time for the Sunset-Monarch Oil Company?

A. This doesn't say for the Sunset-Monarch Oil Company at all. It says for a $9\frac{5}{8}$ inch reamer.

Q. What reamer was that?

A. Order 709, and shop number 1073.

Q. Compare it with the shop order records, if you wish.

The COURT.—Don't those show for themselves what they are?

Mr. BLAKESLEE.—Except for the discrepancy

(Testimony of A. G. Willard.)

in the numbers 708 and 709.

Mr. LYON.—I don't think this witness knows anything about it; furthermore, it is all immaterial. There is no claim here—

The COURT.—Just a minute, Mr. Lyon. Tell what this order shows.

The WITNESS.—These are time cards, your Honor, of the men that work in the shop of Wilson & Willard Manufacturing Company, on this date.

Q. That is all there is to it?

A. That is all there is to it.

Q. The COURT.—That is all there is to it. That will be marked as an exhibit.

Q. (By Mr. BLAKESLEE.) When was the first work done on that?

The COURT.—Don't they show?

The WITNESS.—Yes, sir.

Q. (By Mr. BLAKESLEE.) That was the job, was it?

The COURT.—What is that?

Mr. BLAKESLEE.—I asked him if that was the job.

The COURT.—What job?

Mr. BLAKESLEE.—The job on filing the order for the Sunset-Monarch Oil Company.

A. I can't state that positively; I don't know who this $9\frac{5}{8}$ inch reamer went to; we billed a $9\frac{5}{8}$ inch reamer in the shop [604—543] of the Wilson & Willard Manufacturing Company at that time for the Sunset-Monarch Oil Company.

Q. Have you looked through the records to find if

(Testimony of A. G. Willard.)

any other reamer was billed at that time than this 709?

Mr. LYON.—Objected to.

The COURT.—Objection sustained. [605—544]

[**Testimony of Fritz R. Rydgren, for Defendants.**]

FRITZ R. RYDGREN, called by and on behalf of the defendants, being first duly sworn, testified as follows:

Direct Examination.

(By Mr. BLAKESLEE.)

Q. Please state your full name, age, residence and occupation?

A. My name is Fritz R. Rydgren; my occupation is tool-smith, with the San Pedro, Los Angeles and Salt Lake Railroad at present.

Q. Have you at one time worked for the defendant company in this case, the Wilson & Willard Manufacturing Company? A. Yes, sir.

Q. When did you commence such employment?

A. I commenced on the 9th of July, 1909.

Q. And when did you leave that company?

A. On the 27th of July, 1912.

Q. Did you work on under-reamers made by that company? A. Yes, sir.

Q. What sort of work did you do on such under-reamers?

A. I done the hardening of the top of the under-reamer, and I made keys for them and levers and wedges and springs, necessary parts, and at times tee bars and cutters and tongs, cutter tongs.

(Testimony of Fritz R. Rydgren.)

Q. Did you ever have anything to do with keys for the Wilson under-reamers? A. Yes, sir.

Q. What were those keys used for in the reamer?

A. The keys I drew out from under the hammer from nickel steel mostly.

Q. What were they used for in the reamer?

A. They were used to hold up the tee bar.

Q. On the bottom of the spring? A. Yes.

Q. They were a single-piece key, were they? [606—545] A. Yes, sir.

Q. Do you recollect when you made the first of such single-piece keys?

A. It was in the early part of 1911.

Q. And do you know who made the first of such single-piece keys made in that shop?

Mr. LYON.—That is objected to as calling for the conclusion of the witness.

The COURT.—I think so. Objection sustained.

Mr. LYON.—I want to say that I object to all the testimony of this witness as not rebuttal, unless it be brought down to some specific part of the testimony.

The COURT.—I think so, Mr. Blakeslee, and it seems to me all this is not rebuttal so far.

Mr. BLAKESLEE.—I am going to specifically rebut.

The COURT.—If you have got any rebuttal, just ask him, and let us get down to the rebuttal business.

A. There was no reamer key made by me until I got the sketch from someone, I don't know who gave me the sketch, but there was a rough pencil sketch on a piece of wrapping paper handed to me.

(Testimony of Fritz R. Rydgren.)

Q. (By Mr. BLAKESLEE.) Did Mr. Robert E. Bole, the complainant in this case, give you any instructions at any time for making such single-piece Wilson reamer keys, or give you any such sketch?

Mr. LYON.—Object to that as leading.

The COURT.—Did Mr. Bole testify that he did.

Mr. BLAKESLEE.—He testified that he made a sketch from which the first key was made.

Mr. LYON.—He didn't say that he gave it to this man.

The COURT.—Did he say who gave it to this witness?

Mr. BLAKESLEE.—He said it was attached to the order, and the order went to the shop.

The COURT.—I am asking you if he gave it to him specifically? [607—546]

Mr. BLAKESLEE.—Not specifically

The COURT.—Objection sustained.

Q. (By Mr. BLAKESLEE.) From whom did you obtain such sketch?

A. I don't remember who gave me the sketch.

Q. And did anybody in the year 1911 work on making keys in that shop but you?

A. No, there was nobody else that made any keys except me, that I know of.

Q. Now, were there any differences as between those keys as to the thickness or strength of the material or anything of that sort as you made them from time to time?

A. The only difference in the size of the keys was in the size of the reamers; the smaller reamers take

(Testimony of Fritz R. Rydgren.)

a thinner key and the larger ones take a thicker key, thickness and width, both.

Q. As to any sized reamer, was there any difference made at any time as to the thickness or strength of the key?

A. There was no change that I know of, except what was made in the machine-shop; I forged them all to the same sizes that were ordered.

Mr. BLAKESLEE.—That is all.

Cross-examination.

(By Mr. LYON.)

Q. You didn't see all the keys after they were machined, did you? A. No.

Q. In other words, your work on the keys and familiarity with them ceased after you forged them; is that true?

A. Sometimes they came back to me to be tempered on the ends.

Q. Sometimes you saw them then to temper them, and sometimes you didn't?

A. Yes, that is the idea. [608—547]

Q. And you can't positively state, then, as to what was the construction of every one of those keys, can you, when they were afterwards put into the reamer?

A. Will you state that again?

Mr. LYON.—The question is withdrawn; I think it is argumentative.

Q. Now, in making up those keys and forging them, you had to have some directions in the beginning as to the size of the key and the wing on it, and so forth, didn't you? A. Yes.

(Testimony of Albert W. Houriet.)

Q. And that was the purpose of this sketch?

A. That was the purpose of the sketch.

Mr. LYON.—Now, that is all.

The COURT.—Call your next witness.

Mr. BLAKESLEE.—That is all.

The COURT.—There are some questions I would like to ask myself, if counsel on each side are agreeable to it.

Mr. BLAKESLEE.—We invite it, your Honor.

Mr. LYON.—So do we.

The COURT.—Mr. Houriet. [609—548]

[Testimony of Albert W. Houriet (Recalled by the Court).]

ALBERT W. HOURIET, recalled by the Court, testified as follows:

The COURT.—Mr. Houriet, who was present when you first saw this key taken out of the reamer Number 120 by driving a chisel in it?

A. Who was present?

Q. Yes, sir.

A. Well, I was working with it by myself when I first took it out.

Q. About when was that? A. The date?

Q. Yes.

A. Well that was about the middle of February.

Q. About the middle of February, 1911?

A. 1911.

Q. And how many times did you take it out and put it in before you called Knapp's attention to it?

A. Well, I should judge I took it out two or three times. At first I tried it with a chisel and then I

(Testimony of Albert W. Houriet.)

picked up a file there, and I said, "Anything that is tapered like that is good to take it out."

Q. You said that to whom?

A. To Mr. Knapp, the foreman.

Q. You said that to Mr. Knapp. Was he present the first time you used the chisel?

A. He was not there at that time when I was working, no, not that I remember of.

Q. Did you take it out and put it in before you called Mr. Knapp's attention to it?

A. I took it out, yes, sir.

Q. And how long after you had taken it out with the chisel was it that you called Mr. Knapp's attention to it? [610—549]

A. Why, immediately, as soon as I could see him in the shop.

Q. And who else's attention did you call to it?

A. I don't remember of calling anybody else's attention to it.

Q. You just called Mr. Knapp's attention to the fact that you could take it out with the chisel or file?

A. Yes, sir.

Q. And did you demonstrate it to him?

A. I did.

Q. And at about the middle of February, 1911?

A. Yes, sir.

Q. Did you ever demonstrate that to anybody else?

A. Yes, sir, I did.

Q. To whom?

A. Why, to anyone that happened to come into the shop of Mr. Wilson's.

(Testimony of A. W. Houriet.)

Q. Well, whom do you remember that you demonstrated it to?

A. I don't know the men in particular, whose names I can remember; I don't know them.

Q. What is that?

A. I don't know the gentlemen's names that came in there, buyers of reamers who would come in.

Q. That was subsequent—

A. That was afterwards; it was taken out.

Q. What is that? A. It was afterwards.

Q. I am speaking about this reamer 120; how many times did you take that key out and put it in?

A. Oh, I couldn't say offhand how often I had it in and out; maybe two or three dozen times.

Q. You don't remember of showing it to anybody except Mr. Knapp that you could do it that way?

A. Yes, I remember showing it to other people that come there [611—550]

Q. Well, who?

A. I can't remember their names; I didn't know them; I didn't know them by name; he would call me over to go demonstrate the reamer, to take it apart.

Q. I know; this is 120 I am talking about.

A. This same reamer.

Q. How long was that there after they put this single-piece key in?

A. Well, I should judge in the neighborhood of two or three months, a couple of months, anyway; it was taken in the back of the shop and put on a pair of horses there and when anyone would come in Mr. Wilson would have me go out and demonstrate the

(Testimony of Robert E. Bole.)

reamer, take the cutters out and put the key in.

The COURT.—Now, is there any examination that either of you desire to make in regard to this matter from this witness along this line? Mr. Bole, you take the stand. [612—551]

[Testimony of Robert E. Bole (Recalled by the Court).]

ROBERT E. BOLE, recalled by the Court, testified as follows:

The COURT.—Who was present when you first used a file to get this key out of the reamer 120?

A. Mr. Wilcox, I believe, was present; he was around there; there was quite a few men around the shop backwards and forwards; they were all more or less interested in it, and Mr. Naphas was there.

Q. Well, to whom did you first call attention to the fact that you could get it out with a file?

A. Mr. Houriet.

Q. Mr. Houriet?

A. Mr. Houriet was right there. As I say, he attempted to drive the key in; that was the first time it was attempted to put a single-piece key in the reamer, and he was driving it in when I had gone to grind up this file to get it out, and the light hammer he had in his hand would not put the key in; the tension of the spring would cause it to rebound, to come out, it wouldn't go under the spring, and we used a sledge, and Mr. Houriet was there when we did that; I drove the key in with the sledge; I had tried it or he had tried it with a light hammer in the first place, and then I took the light hammer and I

(Testimony of Robert E. Bole.)

couldn't put it in, and then we took the sledge and the sledge drove it in, and that was on account of the steep taper, and then he was right there after it got through and I took this file that I had ground out and took the key out.

Q. Had you removed this key with any other instrument but a file prior to that time? A. No, sir.

Q. Had you attempted to pry it out with one of these things with a hook on the end of it?

A. No, sir; when the key was finished and ready to be pried out [613—552] the first thing I did was to take one of these old files that was used around for filing up plungers; I broke it in two and took the temper out of the end so that when you hit it with the hammer the steel wouldn't fly; I held it under the wheel until it got cherry red, got a temper on it, and then I took and ground the other end like this tool I had yesterday, and that was the tool I used and that was the first tool used.

Q. When was that?

A. That was about the middle of February, 1913, as near as I remember.

Q. 1911, you mean?

A. 1911; I am not positive, exactly.

Q. Well, the first time you called Mr. Wilson's attention to it you say Mr. Naphas was present?

A. Yes, sir, that was—Mr. Wilson had not come down from his house yet that morning; he wasn't there when we tried—when we put the key in. Just as we got the key in and I had driven it out—I am pretty sure I had driven it out once or taken it out

(Testimony of Robert E. Bole.)

once, and we put it back and Mr. Wilson came along, and Mr. Wilson said in sort of a sarcastic manner, "Well," he says, "you have got it in; now let's see you get it out."

Q. And you say Naphas was there?

A. Naphas was there.

Q. At that time? A. At that time.

Q. Now, when was this.

A. This was about the middle of February, 1911.

Q. Well, that was the first time you had ever taken it out with a file?

A. Yes, sir; the first time it was ever taken out at all.

Q. Was Mr. Houriet there?

A. Yes, sir. [614—553]

Q. Did the key have those offsets in the lower end of it, each end, those little nicks in it as indicated in the drawing here?

A. Heavy brown paper drawing?

Q. Yes, sir. A. No, sir, it didn't.

Q. Didn't have those in it?

A. Didn't have those in it. The corner was broken or tapered, but it didn't have these notches in it.

Q. Those notches were not in the key that you took out?

A. No, sir, I know they were not; if they were ever in that key they were put in there afterwards.

Q. Now, as I understand, Mr. Naphas didn't testify in this interference proceeding?

A. No, sir.

(Testimony of Robert E. Bole.)

Q. Why didn't you have him testify in these proceedings?

A. Well, Mr. Lyon said that it was not necessary. I asked him if he wanted me to go and get Mr. Naphas and he said it was not necessary; he said we had the case won; he said there was not anything to do as he could see, and he said we didn't need him.

Q. When did you first talk to Mr. Naphas about it?

A. The first time I talked to him was the day I went down to the shop there to see him; I recalled that Mr. Naphas was there at that time, and I told Mr. Lyon so, that I had never gone to see Mr. Naphas.

Q. And you didn't interview Mr. Naphas as to what his testimony would be even at that time?

A. No, sir; I asked him what he remembered about it and he told me what he remembered about it.

Q. Now, when was this?

A. That I went down there?

Q. Yes.

A. It was—I think it was the day before yesterday; I think it [615—554] was day before yesterday, or the day before that.

Q. Very recently, anyhow? A. Very recently.

Q. (By Mr. LYON.) Since the commencement of this trial?

A. Yes. I do remember one time that my brother had met Mr. Naphas, and in talking to him, why my brother—

The COURT.—You needn't tell what your brother

(Testimony of E. C. Wilson.)

said. That would be improper evidence. That is all I desire to ask this witness.

Mr. LYON.—Mr. Bole—the whole deposition is in evidence though, isn't it?

The COURT.—Yes.

Mr. LYON.—I have no questions to ask.

The COURT.—Stand down.

Mr. BLAKESLEE.—No question. [616—555]

[Testimony of E. C. Wilson, for Defendants (Recalled in Rebuttal).]

E. C. WILSON, recalled by the defendants in rebuttal, testified as follows:

Direct examination.

(By Mr. BLAKESLEE.)

Q. I show you a paper marked Plaintiff's Exhibit Adams sketch, and ask you if you ever seen it before (handing to witness)?

Mr. LYON.—We object to that as irrelevant and immaterial, and not rebuttal.

Mr. BLAKESLEE.—The witness Adams testified he didn't recollect that; I want to show it in the record, the fact that it was made by Mr. Adams six months ago and he can't remember it, whereas he does remember a sketch made six years ago.

Mr. LYON.—Why didn't you do it on cross-examination of the witness?

Mr. BLAKESLEE.—I merely want to get it in evidence.

Mr. LYON.—You can't impeach the testimony of Mr. Adams this way. When he was on the stand

(Testimony of E. C. Wilson.)

why didn't you offer it?

The COURT.—The paper shows on its face that it is the Adams sketch.

Mr. BLAKESLEE.—It is offered in evidence. your Honor; I just wanted to get it in evidence.

The COURT.—Well, mark it in evidence.

Mr. BLAKESLEE.—All right.

The COURT.—Does that close your case?

Mr. BLAKESLEE.—That closes our case.

The COURT.—All right. Mr. Wilson, who first showed you that this single-piece key could be removed with a chisel or a file? A. Mr. Houriet.

Q. When was that?

A. That was just at the time the reamer was first completed so it could be assembled; it was some time in the latter part of February, 1911; it was about the middle of February, I should [617—556] judge, 1911.

Q. What did Mr. Houriet remove the key with?

A. He removed it with the tang of a file; he had a piece of a file that he picked up off of the floor and put the end in one end of it and pried it out.

Q. That is the first time that you saw that done?

A. That is the first time I ever saw that done.

Q. How had the key been removed prior to that time?

A. We had removed it two or three times with a lever. When the reamer was first assembled we had fastened the key so it could be removed with a lever, but later it was changed over and was one which we had in stock for another purpose, and it was not an

(Testimony of E. C. Wilson.)

easy task to remove the key that way, and it was giving me some little concern, always had from the time I first thought of a single-piece key, and I was sitting in the office and Mr. Knapp came in very much elated about something, and he said, "Wilson," he said, "we don't need that lever to take that key out of that reamer."

Q. Who said that?

A. Mr. Knapp, the foreman, and I said, "Well, how are you going to do it, William?" Well," he says, "come on out and I will show you what Houriet has done." So he took me out to the shop where Mr. Houriet had been working on the reamer, and Mr. Houriet took a file and drove one end of it underneath the key and drove the key out. I saw Mr. Houriet do that many times afterward in demonstrating the reamer to *respective* customers and people who were there interested in oil well tools.

Q. Well, did you ever see Mr. Bole remove it with a file? A. I never did.

Q. When did you commence manufacturing these single-piece keys in the business?

A. May or June of 1911.

Q. May or June, 1911? [618—557] A. Yes.

Q. Now, during the year 1911 were you manufacturing very many of these reamers with that single key?

A. Yes, sir, we made quite a number of them; yes, sir, after we first adopted them we made them regularly.

Q. Made them regularly? A. Yes, sir.

(Testimony of E. C. Wilson.)

Q. And in fact, you abandoned the other style?

A. Yes, sir. We went cautiously at first and found that it worked out so satisfactory that we could certainly adopt it.

Q. And kept that up during 1912, manufacturing these keys right along? A. All the time.

Q. All the time?

A. Yes, sir; are still making them.

Q. Yes. Well, during that time, 1911, the balance of 1911 and 1912, did you manufacture any double key device? A. No, sir.

Q. Did you manufacture any other reamers with other means of fastening?

A. I don't believe we made any other block and screw or double-key type, but we have done so here the last few months.

Q. (By Mr. BLAKESLEE.) Which, during the last few months, if I may ask?

A. I believe in December.

Q. I mean which type?

A. Oh, we made some block and screw type reamers during December, January, February and March of this year.

Q. They were so ordered, were they?

A. They were so ordered.

The COURT.—As I understand, you don't remember any occasion when Mr. Bole and Mr. Naphas were together and removed this key [619—558] from that reamer 120? A. I do not.

The COURT.—That is all. Do you want to ask him any questions?

(Testimony of E. C. Wilson.)

Mr. BLAKESLEE.—No, sir.

Mr. LYON.—Mr. Benjamin, I will have to have from your office a transcript of the testimony in the interference proceedings. This copy is wrong in one of the answers that I want to read to Mr. Wilson, unless Mr. Wilson will—he is familiar, I think, with his testimony, and it will save the Court's time if he will state it.

Mr. BLAKESLEE.—What's the substance of it?

Mr. LYON.—I want to know if it is not a fact, Mr. Wilson, at the time of your giving your deposition in the interference proceedings commencing on May 28th, 1914, and until after our case had been put in in the fall, you did not know and so state it in your testimony that you did not know the name of the man that discovered that the single-piece key could be removed from this reamer Number 120, in the spring of 1911?

The WITNESS.—I don't see how I should testify that way, because I did know; I remember distinctly the circumstance.

Q. You so decidedly testify?

A. I don't know how I could have testified any other way.

Mr. LYON.—To save time, your Honor, of the Court, I will offer, then, the whole of Mr. Wilson's deposition in evidence, and the reporters now have it.

Mr. BLAKESLEE.—We object to encumbering this record with that whole deposition.

The COURT.—There have been several depositions read in evidence, and I think any statement

that the defendant made is admissible in evidence. Now, Mr. Lyon claims that there is a part there that is contradictory of his present testimony. [620—559]

Mr. BLAKESLEE.—We invite a comparison, if the Court will wait until the reporter—

The COURT.—I won't leave the case open for that purpose. Upon the argument of the case—now, we will have this understood—upon the argument of the case I will allow Mr. Lyon to read the questions and answers that relate to this particular thing.

Mr. BLAKESLEE.—Yes, sir; we have no objection.

The COURT.—That is understood, gentlemen.

Mr. LYON.—It may be repeated in two or three places.

The COURT.—Well, whatever it is, any questions and answers that relate to that controversy may be read in the argument and become part of the record.

Mr. BLAKESLEE.—We have no objections.

The COURT.—Now, I understand this case is closed, with the exception of introducing some records of the Patent Office which either side may desire to introduce, and this question that is just now raised. How long will it take to argue this case, gentlemen?

Mr. LYON.—If your Honor please, I would like to have a statement of what records are to be introduced here, so there will be no dispute hereafter. I want to know what to meet, that is all.

The COURT.—Yes, sir, you are entitled to that.

Mr. BLAKESLEE.—There will be the certified

copy of the Wilson application.

Mr. LYON.—That is in evidence now.

Mr. BLAKESLEE.—No, that was reserved, that offer, until the other copy had come; and the certified copy of the decision rendered in the Patent Office in the interference proceeding, involving the patent in suit; and the application of Mr. Wilson. Those are the only records.

Mr. LYON.—Does that complete all you want to offer? [621—560]

Mr. BLAKESLEE.—That will complete our proof.

Mr. LYON.—We will offer simply the evidence that the appeal has been taken from that decision.

The COURT.—(After discussion.) I expect to return from San Diego and be here two weeks from now, two weeks from next Monday, and I will hear this argument in this case on Monday or Tuesday after I return from San Diego. It may be that I will be disappointed in getting back in that time, in which event it will go over for three weeks. This will be the first case I will consider in Los Angeles.

Mr. BLAKESLEE.—The first Monday or Tuesday subsequent to your return?

The COURT.—Yes, sir. [622—561]

April 12, 1915. 10 o'clock A. M.

Mr. BLAKESLEE.—I think, your Honor, the question of the offering of the certified copies of the records in the Patent Office is first in order.

The COURT.—Have you seen those, Mr. Lyon?

Mr. LYON.—No, sir. I will ask, what is the purpose of the offer of the certified copy of the file-

wrapper and contents?

Mr. BLAKESLEE.—Simply under the decision to show that the record in the Patent Office with respect to these copending applications—all of the Patent Office records under numerous decisions in interference matters are considered by the Court on these questions of priority. Where those questions of priority have been determined by the Patent Office and, as we are claiming, the lack of originality as well as lack of priority in the complainant Bole, and also under the specific defense in Section 1020 of the Revised Statutes, that the patent is surreptitiously obtained, I want to show actual identity of the subject matter of the two applications. There is in evidence already a certified copy of the record showing that the interference was declared between the issued Bole patent in suit and the copending application of Wilson. But I wish to reinforce that showing by submitting this certified copy of the application itself as tending to show identity of invention. We claim that the controversy in the Patent Office was one with respect to priority and originality concerning identical subject matters. It may be that that offer is not absolutely necessary, but I think to complete the record under that defense it is proper. The mere declaration of the interference raises a presumption of identity of subject matter, but I wish to make that a positive portion of the record in that manner.

Mr. LYON.—Our objection to it is that it is incompetent, [623—561] irrelevant and immaterial for any purpose in this case. We are not here to

try the question of what documents one of these defendants has filed in the Patent Office or in that proceeding. The patent has issued. The defense here is that this man Wilson is the inventor. That question is to be determined upon the testimony taken in the usual form, with an opportunity to cross-examine the witnesses. An application for a patent filed, and filed as shown, subsequently to the application of Mr. Bole, can have no bearing on this controversy as made by the pleadings here; and the question of whether or not there is an interference proceeding pending in the Patent Office is entirely collateral. It is for this Court to determine the issues of this case independent of what records may exist in some other tribunal and which is not final res adjudicata between the parties.

Mr. BLAKESLEE.—We have gone exhaustively into that and take square issue, and we shall show that this Court, while not absolutely controlled by the decision of the Patent Office with respect to priority and originality, is to adopt that finding of the Patent Office unless convincing proof is shown to the contrary.

The COURT.—The objection is overruled.

Mr. LYON.—And with respect to the offer of the certified copy of the decision of the Examiner of Interferences, we object to that upon each of the grounds stated in the objection to the proceeding exhibit and upon the further ground that it appears from the said exhibit itself that that is merely a copy of a decision. It is not a copy of a judgment rendered; and that no judgment has, in fact, been ren-

dered in that proceeding.

The COURT.—That is, it is just an opinion?

Mr. LYON.—It is just an opinion and it is not shown that any judgment has been entered or that no appeal has been taken. And in connection with that objection I call your Honor's attention [624—562] also to a certified copy from the United States Patent Office showing that from this decision an appeal was taken, this being the lowest trial tribunal, and that that appeal has been set for hearing on the 7th of May, 1915.

The COURT.—How can you have an appeal without a decision?

Mr. LYON.—There is a decision but no judgment.

Mr. BLAKESLEE.—The decision is of priority, but there is no entry of judgment. And if that appeal had not been taken a patent would have issued to Wilson. The fact that an appeal has been taken is immaterial. It is the adjudication of the Patent Office and as the law is laid down—

The COURT.—I don't think the fact of taking an appeal has any material bearing upon the receipt of this in evidence. The objection is overruled.

Mr. LYON.—In that connection I call your Honor's attention to the fact that I understand counsel has now offered all of the records that he desires to offer in connection with that Patent Office proceeding.

The COURT.—That is as I understand it.

Mr. BLAKESLEE.—Yes; those two certified copies.

Mr. LYON.—Now, I wish to offer in evidence a

certified copy from the United States Patent Office showing that an appeal has been taken and is pending in this interference proceeding.

Mr. BLAKESLEE.—We in turn object to that as immaterial. There has been an adjudication in the Patent Office and that adjudication stands until there is a reversal. That is the ruling of the Patent Office. It is another forum. And whatever the procedure may be on that appeal is immaterial with respect to the effect of the decision rendered upon the issues of this case and the consideration which the decisions of the Supreme Court and the other Federal courts say is to be given any finding of the Patent Office. [625—563]

The COURT.—The objection will be overruled.

(The two certified copies offered in evidence by Mr. Blakeslee are marked respectively, Defendant's Exhibit 16 and 17.)

Mr. LYON.—The last exhibit having been received in evidence, I now move to strike out from the record and exclude from consideration by this Court the alleged decision by the Examiner of Interferences, on the ground that the same is shown to not have become final, and that it is subject to review in the Appellate Court. And in that connection I want to call your Honor's attention to the decision—and it is a general rule—of Judge Hanford, in the case of Bowers Company vs. the New York Company, 77 Federal, 980, page 983. (Reads decision.)

(Discussion.)

The COURT.—The motion will be overruled. I

will reserve the question however, during the trial of the case.

Mr. LYON.—Now, as to the next matter for your Honor to determine, namely, with regard to this Heber deposition, I have one or two further authorities. I am not going to take the time of the Court to read those that I read before, but simply those further ones. (Reads decisions.)

Mr. BLAKESLEE.—Our position is that the trouble with counsel's whole argument is that he attempts to bring something in here which is not a deposition. Now, old rule No. 69, which provides for taking these proofs, provides for taking them out of court within certain times. The proofs in Patent cases were not taken in court under the old equity rules. Now they are to be taken in court, unless as rule 47 says, "the Court, upon application of either party when allowed by statute, or for good and exceptional cause for departing from the general rule, to be [626—564] shown by affidavit," etc. In other words, it is not a deposition unless it is taken in accordance with this rule. "All depositions taken under the statute or order of the Court shall be taken as follows:—" Now, the only two ways they could take something which would be a deposition, one way would be by following the statutes. The other way would be by obtaining an order of the Court. But both of those ways must parallel the third way, namely, the way provided by the rules. Now, had we attended the taking of the deposition or acquiesced in the taking, or countenanced its taking, we would be doubtless in a singular position

before the Court at this hour. We stayed away from the taking of that deposition purposely. We did not wish to countenance it in any respect and we did not wish the argument to be made that we were there and ready and could have cross-examined. Your Honor has stated that possibly we have been remiss within considerations of equity in not moving earlier to suppress this deposition. Our contention is that we moved at the proper time. In other words, when it was offered. We believe that, assuming that that was not the most perfect equity or, resolving equity into the consideration of fairness, that it is not good equity for a man to depart from the equity rules. That is what counsel wishes to do. We believe that we know why he did that—this is off of the record entirely—he did not wish that witness produced here—

Mr. LYON.—I object to counsel's remark.

The COURT.—Remarks outside of the record will have no influence on the Court, and counsel ought not to make them.

Mr. BLAKESLEE.—The point is they did not produce him. He was in California not long ago and he was not here at the time of the trial, and we say there has been no deposition taken. We might say that if the Court insists that the complainants will be improperly injured by barring this deposition, that the suggestion [627—565] might be made that we be permitted to read the deposition of the witness Heber taken in the interference. That would be, it seems to me, a fair swap on this question. But we do not think that even that offer is

necessitated in view of the mandatory terms of the rules. The only way that such a deposition can be a deposition would be by taking it under the rules. As I say, it was not negligence that caused us to stay away, but it was caution.

The COURT.—I think the proper practice is to make a motion to suppress the deposition. I don't think that the parties by staying away purposely when they have notice to take the deposition, is proper practice. The objection to the deposition is overruled.

Mr. BLAKESLEE.—May we ask permission to read the deposition of the witness on cross-examination taken on the interference?

The COURT.—I don't think you are entitled to it.

Mr. BLAKESLEE.—The decisions here show that the records of the Patent Office are to be considered, where this question is passed upon and within the discretion of the Court the witness's testimony may be considered.

The COURT.—Was that deposition taken in the interference proceeding?

Mr. BLAKESLEE.—Yes, but his testimony does not exactly accord with the present testimony.

The COURT.—You mean in this deposition?

Mr. BLAKESLEE.—Yes.

Mr. LYON.—He had no opportunity to explain the differences.

The COURT.—If you had cross-examined him and it did not agree, you might have shown the disagreement in a proper way. Read the deposition, Mr. Lyon.

(Mr. Lyon thereupon reads the deposition of Roy L. Heber, as follows:) [628—566]

“In the United States District Court, Southern District of California, Southern Division. Robert E. Bole and Edward Double, Complainants,—vs—Wilson & Willard Manufacturing Company and Elihu C. Wilson, Defendants. In Equity B-19. Deposition of Roy L. Heber taken on behalf of complainants in the above-entitled suit, pursuant to the annexed notice, said deposition being taken under Rule 54 of the Equity Rules and as provided by Sections 863, 865, 866 and 867, of the Revised statutes of the United States; said deposition being taken at the office of Frederick S. Lyon, 503-508 Merchants Trust Company Building, in the City of Los Angeles, California, before I. Benjamin, a notary public within and for the county of Los Angeles, state of California, commencing at the hour of 10:30 A. M. Present, Frederick S. Lyon, Esq., on behalf of complainants; no appearance on behalf of defendants.

[Deposition of Roy L. Heber, for Plaintiffs.]

“ROY L. HEBER, a witness produced on behalf of complainants, being first duly sworn according to law, testified as follows:

Direct examination by Mr. LYON.

Q. 1. Please state your name, age, residence and occupation.

A. My name is Roy L. Heber; residence, Maricopa, Kern County, California; age, forty years; I will be a farmer as soon as I get to Illinois.

Q. 2. Please explain what you mean by the last

(Deposition of Roy L. Heber.)

part of your preceding answer 'as soon as I get to Illinois.'

A. My wife and family are at her father's place at Hudsonville, Crawford County, Illinois. Her father has given us 55 acres of land to farm and is going to help us build a home and equip the farm.

Q. 3. And when do you expect to leave for Hudsonville, Illinois?

A. I have engaged my berth for tonight at 9 o'clock on the Santa Fe.

Q. 4. Have you any present intention of returning to California? A. Yes, sir.

Q. 5. When?

A. I just can't say when I expect to return. We still have our property here.

Q. 6. You don't know whether you will be here in March of this year or not?

A. No, I don't think [629—567] I will be.

Q. 7. Have you ever in any capacity been connected with the drilling of oil wells or in the oil-well business? A. Yes, sir.

Q. 8. To what extent?

A. Outside of the time that I have farmed, I have had a lifetime experience following the gas and oil and water well drilling business.

Q. 9. Are you acquainted with Robert E. Bole, one of the complainants in this suit? A. Yes, sir.

Q. 10. Approximately how long have you known Mr. Robert E. Bole?

A. I have known Robert E. Bole since 1891.

Q. 11. Did you ever at any time have any con-

(Deposition of Roy L. Heber.)

nection with the Sunset-Monarch Oil Company at Maricopa, California? A. Yes, sir.

Q. 12. In what capacity were you connected with that company?

A. I went to work for the Monarch-Oil Company as driller and was promoted to general foreman.

Q. 13. In connection with that company's business did you at any time have any business connection with said Robert E. Bole? A. Yes, sir.

Q. 14. Please state what it was.

A. At that time we were having trouble with our machine-shop. The foreman of the shop was not giving satisfaction and I complained about it to the company and they instructed me to put a man in there that would be satisfactory. I sent for Mr. Bole to come up and take that position.

Q. 15. What previous knowledge had you had with Mr. Bole's qualifications for such position?

A. I knew Mr. Bole had had experience in his father's shop at Pittsburg, Pennsylvania, where Mr. Bole's father ran a fishing-tool manufacturing establishment.

Q. 16. What do you mean in your last answer by the 'fishing-tool manufacturing establishment'?

A. Fishing tools are tools used in recovering tools that are lost in wells.

Q. 17. In the drilling of oil wells?

A. In the drilling of oil, gas and water wells.

Q. 18. And when was it that you sent for Mr. Robert E. Bole to take charge of the Sunset-Monarch shop at Maricopa, California?

(Deposition of Roy L. Heber.)

A. I think I wrote to Robert E. Bole about the middle of September, 1908, and I think I got a reply to the letter in a day [630—568] or so after that, and Mr. Bole came up to the shop on or about the 17th or 18th of September, 1908.

Q. 19. Did Mr. Bole take charge of the shop at that time? A. No, sir.

Q. 20. Please state the circumstances.

A. Mr. Segur, vice-president and manager of the Sunset-Monarch Oil Company at that time, was there at the shop with a man by the name of Converse on the same day that Mr. Bole arrived there. He also had a man to take the position as foreman of the shop after he had already instructed me to get somebody.

Q. 21. How long did Mr. Bole remain there?

A. I think he left Maricopa the next day.

Q. 22. Did you have any conversation of any kind with said Robert E. Bole while he was in Maricopa, California, at that time in regard to oil well drilling or fishing tools? A. Yes, sir.

Q. 23. Please state what it was and how such conversation came to be had.

A. Mr. Segur decided to put Mr. Converse in charge of the shop and not Mr. Bole, the man that I had sent for. I gave Mr. Bole an order for a 9 $\frac{5}{8}$ inch Wilson under-reamer and a 10-inch casing spear.

Q. 24. Did you have any conversation with Mr. Bole about this under-reamer at the time of giving him the order? A. Yes, sir.

Q. 25. Please state that conversation.,

(Deposition of Roy L. Heber.)

A. I complained about the Wilson under-reamer giving trouble with the pins. The pins had to be drilled out, which was bothersome. That was the block and screw type. I talked that over with Mr. Bole and he said he could improve it if I would give him an order; that he would guarantee to send an under-reamer that would not give trouble, and I gave him an order for the under-reamer and for a 10-inch casing spear. We sat down in the shop and I asked Mr. Bole what kind of an improvement he had in mind which would avoid the troubles we had had with the pins which held the block in place, and he sketched a key while sitting in the shop, and said that that would give satisfaction and that we would **not have any trouble with [631—569]** the under-reamer fitted with this key. The key was an ordinary gib-key and the under-reamer was to be provided with a slotted mandrel or tee bar, the body of the under-reamer having a slot through which the key could be pushed into place to seat in the central bore of the under-reamer, and the tee bar or mandrel could work up and down on this key by reason of the slot in the tee bar. The spring which surrounded the mandrel or tee bar would bear on the top of the key. The wing or projection of the key sticking down into the bore of the under-reamer so that the shoulders at each end of the wing would hold the key from sliding out. The tension spring bearing on the top of the key would hold the key in place, the upper end of the spring bearing against a nut on the end of the slotted tee or mandrel. This key, Mr. Bole said,

(Deposition of Roy L. Heber.)

could be readily removed by simply prying up one end and driving the key out. Mr. Bole made a sketch of the key at that time when he was giving me this explanation. My recollection is that that sketch was made on a piece of paper with a lead pencil.

Q. 26. Do you know what became of this sketch?

A. I do not. I don't think it was kept.

Q. 27. Could you reproduce for us such sketch?

A. I don't know whether I can give an exact drawing of it, but I will give you the way it appears to me now. This is the way it looks to me. (Makes a sketch.)

Mr. LYON.—The sketch just made by the witness is offered in evidence and marked 'Bole's Exhibit Heber Sketch.'

Q. 28. What was the particular reason for your desiring to give Mr. Bole an order for these tools at that time?

A. When Mr. Segur instructed me to turn Mr. Bole down and put Mr. Converse in as foreman, he said it would be all right to give Mr. Bole an order for a Wilson under-reamer and a casing spear and to allow him \$35 expense money.

Q. 29. You mean as compensation for the time he had lost? A. Yes, sir.

Q. 30. You gave testimony in the interference [632—570] proceeding pending in the United States Patent Office, No. 37,126, between Elihu C. Wilson and Robert E. Bole, did you? A. Yes, sir.

Q. 31. After the shop of the Sunset-Monarch Oil Company was placed in charge of this other man,

(Deposition of Roy L. Heber.)

Converse, did you pay any particular attention to said shop?

A. Not very much after that; no, sir.

Q. 32. Why not?

A. Mr. Converse was not a practical oil company machinist. He had not had but little experience, if any, in the oil well tool business.

Q. 33. And how long did you remain with the Sunset-Monarch Oil Company thereafter?

A. I was handed my check on Christmas day, December 25, 1908, but I stayed in my quarters until January 1.

Q. 34. Why did you leave the employ of the company at that time?

A. I was asked to resign by Mr. Segur.

Q. 35. Did that request for your resignation have anything to do with the employment of Mr. Converse?

A. I was never given any direct reason for asking me for my resignation. When Mr. Segur asked me to resign I told him he had employed me and he could discharge me, and I did not send in any resignation.

Q. 36. Was the work of Mr. Converse as foreman of such shop satisfactory to you as general foreman of such Sunset-Monarch Oil Company during the time that you remained with such company after Mr. Converse was put in charge of its shop?

A. Decidedly not.

Q. 37. Have you in any manner any interest whatever in this litigation? A. Nothing whatever.

Q. 38. Do you know where Mr. Robert E. Bole

(Deposition of Roy L. Heber.)

went upon leaving Maricopa in September, 1908, at the time that you have referred to in your testimony?

A. I received a postal card from Mr. Robert E. Bole dated at Coalinga, instructing me to forward his mail to Coalinga, California, and my recollection is that that postal card was dated September 19, 1908. I received it on September 20, 1908. This postal card was referred to in my deposition in said interference.

(Signed.)

ROY L. HEBER.

[633—571]

“State of California,
County of Los Angeles,—ss.

“I, I. Benjamin, a Notary Public within and for said county and state, do hereby certify that the foregoing deposition of Roy L. Heber was taken before me in the above-entitled suit at the time and place in the foregoing record set forth; that before giving such deposition said Roy L. Heber was by me duly sworn to testify the truth, the whole truth and nothing but the truth, according to law; that the parties to said suit were represented by counsel as appears in the foregoing record thereof; that said deposition was taken by me and reduced to typewriting and read over by the said Roy L. Heber and signed by him in my presence.

“I FURTHER CERTIFY that I am not interested in the said suit or the subject matter thereof either directly or indirectly, nor am I connected by blood or marriage with any of the parties to said suit.

“IN TESTIMONY WHEREOF I have hereunto

set my hand and affixed my official seal this 13th day of February, 1915.

(Signed.)

I. BENJAMIN,

Notary Public in and for said County and State.”

[634—572]

Mr. LYON.—(Referring to the sketch mentioned in the deposition.) The witness made that sketch, and it is offered in evidence.

Mr. LYON.—Now, I understand that with the exception of certain extracts from Mr. E. C. Wilson’s testimony, this closes the entire testimony in the case, and I don’t know whether the Court desires me to read those—they are short—about three or four answers—into this record at this time.

The COURT.—Yes, read it.

Mr. LYON.—I refer to question 138 on direct examination of E. C. Wilson: (Reading:)

“Q. 138. Now, how does this Bole patent disclosure compare as to the one-piece key shown therein, as in figure 7, with the one-piece key which you have testified about in connection with your conception of an improved reamer on or about January 26, 1911, your disclosure of the improved reamer to others of about February 3, 1911, and the two reamers which you say you had made during February, March and April, 1911, as concerns the construction of the said single-piece key and the inter-relation between the same and the spring and other parts of the reamer?

“A. The key, so far as its general appearance is concerned and general outline, is absolutely the same as the keys we made for those two reamers with the exception, possibly, that it does not show a little notch

at the lower edge of the key, which notches were near the ends of the key. When we first made this key I thought it was necessary to have a notch at each end of the key, and just underneath the edge of it, for the purpose of applying a tool to pry the end of the key upwardly and at the same time draw the key outwardly. To do this it was necessary to have this tool fit in the notch, as we supposed; but we later found that this key could be removed by merely driving a pointed tool underneath one end of the key, raising it up to such a point [635—573] that the downwardly projecting shoulder at the lower edge of the key was removed from the bore of the reamer body and could be driven out from the opposite end of the key. That dispensed with any necessity of putting that notch in the lower edges of the key, and, consequently, we abandoned that notch; and the key which we have made for all these years and which we are now making, abandoned that notch just the same as this key does which is shown in the drawing by the R. E. Bole patent. In other words, the drawing in the R. E. Bole patent is an exact copy of the key we have been making for three years."

Mr. LYON.—Question and answer 333 on cross-examination. (Reading:)

"Q. 333. (By Mr. BLAKESLEE.) Counsel for Bole has insinuated or implied that I have in some manner interfered with your testifying uninterruptedly or fully with respect to the disclosure which you have testified you made to Mr. Bole and the other three persons, on or about the 3d day of February, 1911. Now, have you anything further to say what-

soever with respect to what was said or done at such time of disclosure when Mr. Bole was present, and, if so, please state fully?

“A. As I have previously testified, we had been having some trouble with the block and screw type of Wilson’s under-reamer, as the screws would sometimes stick and cause considerable trouble to remove them preparatory to the removal of the cutters of the under-reamer. We had formerly manufactured a Wilson under-reamer known as our double-key type, and our key device consisted of two-wedge-like portions. But the trouble we had with that under-reamer was the breaking of the slotted tee. At the time the slotted-tee type of reamer was first adopted by me, the drawings for it and also the proportioning of the tee and different parts was left to a draughtsman, I having instructed him to so proportion the tee as to make it as large and as heavy as he [636—574] possibly could. I had supposed that the tee was as heavy and as strong as he could possibly design it to put in the reamer. Consequently the breakages that occurred to it were the occasion of changing to the block and screw type. We had known, of course, that the double-key type was more convenient and caused less trouble when removing the cutters or replacing them in the reamer than the block and screw type. Still, its weakness caused us to use this block and screw type instead. Now, on January 28, 1911, we received an order from the Pacific Iron Works of McKittrick for a 12 inch or 12 $\frac{1}{2}$ inch slotted tee for a Wilson under-reamer. This again very forcibly called to my mind the fact that

this slotted-tee type of under-reamer had some advantages which we did not have with the block and screw type. It suddenly occurred to me that possibly that draughtsman had not proportioned the tee as heavily as could be made, and consequently I went to a draughting-board and drew one, proportioning it as heavily as I could see could be used and was surprised to find that it was possible to use a slotted tee with at least twice the strength of the ones we had formerly used. After satisfying myself that such was the case, and after checking my drawings up with my brother who is also a draughtsman, and determining conclusively that a heavier type could be used, I decided that it was advisable to change to the slotted-tee type of a heavy design. Now, we had had some trouble with the double key or double-piece key, and I concluded that if I could overcome the troubles of the key as thoroughly as I saw I could do with the slotted tee, that we would have, what to my mind seemed to be, a perfect reamer. So I set about to design a single-piece key. I made various sketches and drawing of tees as the different forms or shapes would occur to my mind, and for three or four days, or two or three days, gave them a great deal of thought. One evening I decided to obtain the opinion of some of the men in [637—575] the shop in regard to the relative merits of the different types of keys which I had evolved in my mind. As I have previously testified, I called Mr. Willard and Mr. W. W. Wilson and Mr. C. E. Wilcox and Mr. R. E. Bole, and it seemed to me that I had Mr. Knapp in that conference also. Mr. Knapp is our foreman, and

was so at that time. I showed the different types of keys, one of which required two plugs, or threaded screws, in the body, to hold it in place; another type required only one plug, and still another type—I am not so sure but what I had two different types of keys that could be used which did not require a threaded plug to hold the keys in place. That key or those keys seemed to have the most merit, because it seemed to overcome one of the chief objections to the double-key type as previously used. I was explaining to these gentlemen how these different keys could be put into the reamer and how they could be taken out; and then I explained that these other keys could be put in the reamer, but I couldn't see how to take them out of the reamer. It was easy enough to see how they could be put in place, but how to remove them I was unable to solve. Mr. Bole at that juncture said: 'Pry it out at one end.' I said: 'That is a natural statement to make, but I don't believe there is room to pry it out.' He said that there was room enough. I said it would probably require some special kind of a tool or lever; according to my idea it would have to be pried upwardly at one end and outwardly at the same time, and then it was that Mr. Bole said he could devise a tool which would remove that key. Now, these gentlemen all agreed that the single-piece key was the better type, and it was a question whether or not the key could be used conveniently. That is, whether it could be placed in the reamer and also removed. I thought the matter over some little time and finally concluded to make up an under-reamer of the new design which I had just

worked out. We had an 8-inch under-reamer in stock, and I made out an order [638—576] (which order has heretofore been revealed in my testimony) to change that reamer over—I think that reamer was No. 120—to this new type of slotted tee with a single key. While our workmen were changing this reamer over I noticed Mr. Bole was working on something personally at the bench and around through the shop, but it did not occur to me at the time just what he was doing. I have learned that he was then manufacturing or designing and preparing to manufacture this special tool which he said he could devise for the purpose of removing that key. While he was busy designing that tool one of our workmen one day, in assembling this reamer with the new style of key, instead of using some special tool to pry the key upwardly and outwardly discovered that by driving a wedge-shaped tool underneath one end of the key it pried it up to a sufficient position to enable him to drive the key outwardly from the opposite end. I believe the tool he used at that time was merely the pointed end or handle end of a file. That immediately obviated all the difficulty that we expected to encounter in removing this key, and it dispensed with the necessity of any special tool for the purpose of its removal, and what that tool which Mr. Bole was at that time designing for the purpose of removing this key, I have never learned. He has been that careful not to divulge any of his inventions to me.”

Mr. LYON.—Question 633 on cross-examination and answer. (Reading:)

“Q. 633. I now show you question No. 67 asked

you on direct examination, and your answer thereto, and particularly call your attention to the commencement of a new sentence with the words 'And a very funny thing occurred,' at which point, when giving such answer, you were interrupted by your counsel. Please read this question and answer, and then state what incident or incidents [639—577] it was to which you referred at that time.

"A. I started to say, when I used the words 'A very funny thing occurred' that after I had made my sketch of this key and turned it over to the foreman to manufacture the key, and in which sketch were provided notches for engagement of a tool for the purpose of prying the key upwardly and outwardly, and I believe that we had even made the key in that manner and were using it in this reamer No. 120, and on several occasions took the reamer apart and put it together again for the purpose of showing it to oil men and other men who were interested in the under-reamers—one day one of our workmen instead of using this tool or lever which we had devised for prying this upwardly and outwardly, merely drove the pointed or handle end of a file underneath one end of the key and it pried the key up far enough to disengage the shoulder from the bore of the reamer body, making it possible to drive the key outwardly from the opposite end. This was a simple contrivance and something that I did not think was possible and immediately dispensed with any necessity for providing the key with those notches at the lower end, and also dispensed with any necessity of Mr. Bole perfecting this tool, whatever it was, that he was devising for

the purpose of removing this key. I heard nothing further about the tool."

Mr. LYON.—He also says in rebuttal, in his answer to question 7, on rebuttal, on page 755 of the printed record:

"I myself changed over a lever which we had in stock, and so designed the key that it could be removed with the lever. This lever was abandoned because Mr. Houriet discovered that the key could be removed by simply driving a wedge-shaped tool underneath one end of the key, which would pry the key up into a position which would enable the operator to drive it out from the opposite side of the reamer. That is all that was ever said by Mr. Bole, and all he ever had to do with the invention of the lever, or anything [640—578] he had to say in regard to the key."

The COURT.—Is that all the evidence?

Mr. LYON.—That is all I desire to read.

The COURT.—I believe you have agreed upon the time in which to argue the case.

Mr. LYON.—I believe we have. Two hours and a half on each side. Is there anything else, Mr. Blakeslee?

Mr. BLAKESLEE.—I don't know of anything.

The COURT.—It seems to me Mr. Blakeslee should have the opening and closing.

Mr. LYON.—I think in view of the facts it should probably be that way.

The COURT.—I think Mr. Blakeslee ought under the circumstances to fully open his case.

(Argument by counsel thereupon follows:) [641—579]

Tuesday, April 13, 1915; 10 o'clock A. M.

(Argument by counsel for defendant having been completed.)

The COURT.—In this case on trial I do not care to hear any further argument on the subject. I have carefully considered and I am thoroughly convinced and do not need any further argument or evidence to convince me that Bole invented this key and is justly entitled to a patent. If there had not been any patent issued in the case, or if the patent had been issued to the defendant, I should have decided this case in favor of Bole. There has been a good deal of criticism indulged in concerning some of these witnesses who have testified in favor of Bole, particularly Adams and Heber. I do not see any necessity for their being criticised. If a man wants to fix up evidence, it seems to me that he could fix up evidence more material than those witnesses were able to testify to. And in the same way in regard to this exhibit that has been introduced. If Mr. Bole was wanting to fix up evidence for the purpose of perjuring himself and to have other people perjure themselves, he would have gotten evidence that was more material. Of course, these are material in a way, but they are not in any sense controlling. Now, Mr. Bole has been criticised for not being industrious and active in his application for a patent. Nothing was done with this thing from the time he conceived it in his mind and suggested it to these witnesses till he apparently wrote a letter to Mr. Willard about it in 1911. He was not in the business of manufacturing reamers. He was not in a situation

to put it into execution. According to the evidence, as I view it, he applied to his associates to put this key into use. Of course, until it was tried out, it would be nonsensical to apply for a patent. [642—580] He had no opportunity to apply for a patent, associated as he was with Wilson and Willard, unless they would try it out. I think that entirely excuses his delay down to 1911, from the time this key was invented or put into practical use, until the patent was applied for. I think Wilson was as negligent as Bole in that regard. He was more interested in it probably if he were the inventor than Bole was. He does not make any explanation why he waited nearly two years to apply for a patent. That letter that Bole wrote to Wilson when he got into the difficulty, it seems to me, is the most natural thing in the world for him to do. What it says we can all accept as absolute truth. That is to say, that he wrote the letter and made these claims. And what he claimed in the letter was the most natural thing for him to do if he was the inventor of this key. I think it was a very unnatural and unusual thing for Mr. Wilson to do, if he claimed to be the inventor of that thing, to make a settlement with Bole without including in that settlement the controversy concerning the key. It was very unbusinesslike and very unnatural. I have not the slightest doubt about how to decide this case and I will decide it in favor of complainants. [643—581]

*In the United States District Court Within and for
the Southern District of California, Southern
Division.*

No. B-19—IN EQUITY.

ROBERT E. BOLE and EDWARD DOUBLE,
Complainants,

vs.

WILSON & WILLARD MANUFACTURING
COMPANY and E. C. WILSON,
Defendants.

State of California,
County of Los Angeles,—ss.

LEO LONGLEY, being duly sworn, deposes and says: That he is a shorthand reporter, with offices in the International Bank Building, Los Angeles, California; that he reported the proceedings on the trial of the above-entitled cause; that the foregoing is a full, true and correct record, made by himself stenographically and written out in typewriting, under his directions, by Julia Iserloh, Bertha M. Lippincott and Ora Weishaupt, of the proofs taken on behalf of both parties in the above-entitled cause in equity, and of the proceedings had in connection therewith, being the complete testimony of Robert E. Bole, Harry Naphas and August F. Adams, witnesses on behalf of Complainants, and of E. C. Wilson, Wm. G. Knapp, Chas. E. Wilcox, W. W. Wilson, A. G. Willard, Wm. H. Fahnestock, Albert W. Houriet, E. F. Grigsby and Fritz R. Rydgren, witnesses on behalf of the Defendants, taken in said cause, all in

open court, before the Honorable Oscar A. Trippet, and commencing on the 23d day of March, 1915, at the hour of ten o'clock A. M., and concluding upon the 27th day of March, 1915, at the hour of twelve o'clock, noon; that Complainants were represented by Frederick S. Lyon, Esq., [644] their solicitor and counsel, and Defendants were represented by Raymond Ives Blakeslee, Esq., their solicitor and of counsel, and Frederick S. Stephenson, Esq., of counsel for defendants.

LEO LONGLEY,

Subscribed and sworn to before me this 21st day of April, 1915.

[Seal]

NINA W. BUDDECKE,

Notary Public, Los Angeles County, California.
[645]

*In the United States District Court Within and for
the Southern District of California, Southern
Division.*

No. B-19—IN EQUITY.

ROBERT E. BOLE and EDWARD DOUBLE,
Complainants,

vs.

WILSON & WILLARD MANUFACTURING
COMPANY and E. C. WILSON,
Defendants.

State of California,
County of Los Angeles,—ss.

I. Benjamin, being duly sworn, deposes and says:
That he is a shorthand reporter, with offices in the

International Bank Building, Los Angeles, California; that he reported the proceedings on the trial of the above-entitled cause; that the foregoing is a full, true and correct record, made by himself stenographically and written out in typewriting, under his directions by Julia Iserloh, Bertha M. Lippincott and Ora Weishaupt, of the proofs taken on behalf of both parties in the above-entitled cause in equity, and of the proceedings had in connection therewith, being the complete testimony of Robert E. Bole, Harry Naphas and August F. Adams, witnesses on behalf of Complainants, and of E. C. Wilson, Wm. G. Knapp, Chas. E. Wilcox, W. W. Wilson, A. G. Willard, Wm. H. Fahnestock, Albert W. Houriet, E. F. Grigsby and Fritz R. Rydgren, witnesses on behalf of the defendants, taken in said cause, all in open court, before the Honorable Oscar A. Trippet, and commencing on the 23d day of March, 1915, at the hour of ten o'clock A. M., and concluding upon the 27th day of March, 1915, at the hour of twelve o'clock, noon; that Complainants were represented by Frederick S. Lyon, Esq., [646] their solicitor and counsel, and Defendants were represented by Raymond Ives Blakeslee, Esq., their solicitor and of counsel, and Frederick S. Stephenson, Esq., of counsel for Defendants.

I. BENJAMIN.

Subscribed and sworn to before me this 21st day of April, 1915.

Notary Public, Los Angeles County, California.
[647]

[Complainants' Exhibit "A"—Letters Patent No. 1,080,135, Issued to Robert E. Bole.]

No. 1,080,135. Compl's Exh. "A." U. S. District Court, So. Dist. of Cal., So. Div. No. B-19-Eq. Filed Mar. 23, 1915. Wm. M. Van Dyke, Clerk. Leslie S. Colyer, Deputy.

THE UNITED STATES OF AMERICA to All to Whom These Presents Shall Come:

WHEREAS, Robert E. Bole, of Los Angeles, California, has presented to the COMMISSIONER OF PATENTS a petition praying for the grant of Letters Patent for an alleged new and useful improvement in UNDER-REAMERS, he having assigned one-half of his right, title, and interest in said improvement to Edward Double, of Los Angeles, California, a description of which invention is contained in the specification of which a copy is hereunto annexed and made a part hereof, and has complied with the various requirements of Law in such cases made and provided, and

WHEREAS, upon due examination made the said Claimant is adjudged to be justly entitled to a patent under the Law.

Now, therefore, these Letters Patent are to grant unto the said Robert E. Bole and Edward Double, their heirs or assigns for the term of seventeen years from the second day of December, one thousand nine hundred and thirteen, the exclusive right to make, use and vend the said invention throughout the United States and Territories thereof.

IN TESTIMONY WHEREOF, I have hereunto set my hand and caused the seal of the PATENT OFFICE to be affixed at the City of Washington this second day of December, in the year of our Lord one thousand nine hundred and thirteen, and of the Independence of the United States of America the one hundred and thirty-eighth.

[Seal]

J. T. NEWTON,
Acting Commissioner of Patents. [648]

R. E. BOLE.
UNDERBEAMER.

APPLICATION FILED FEB. 19, 1913.

1,080,135.

Patented Dec. 2, 1913.

Fig. 2

Fig. 1

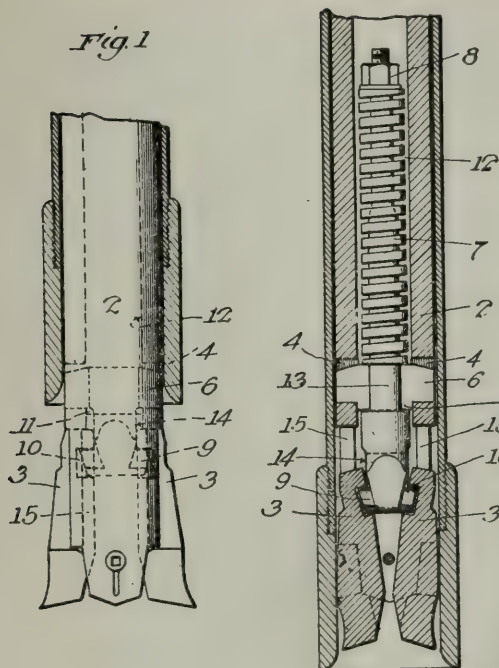


Fig. 3

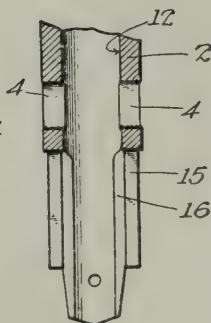


Fig. 6



Fig. 7

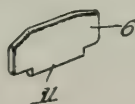


Fig. 4

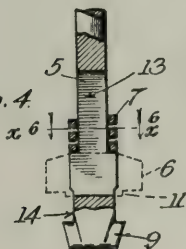
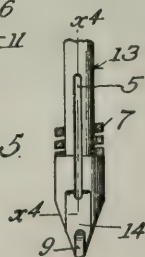


Fig. 5



Witnesses:

Lute A. Allen,
Sully Russo.

Inventor:
Robert E. Bole,

By Lyon & Hackley
Attys.

UNITED STATES PATENT OFFICE.

ROBERT E. BOLE, OF LOS ANGELES, CALIFORNIA, ASSIGNOR OF ONE-HALF TO EDWARD DOUBLE, OF LOS ANGELES, CALIFORNIA.

UNDERREAMER.

1,080,135.

Specification of Letters Patent.

Patented Dec. 2, 1913.

Application filed February 19, 1913. Serial No. 749,343.

To all whom it may concern:

Be it known that I, ROBERT E. BOLE, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Underreamer, of which the following is a specification.

This invention relates to an improvement in underreamers and has for its particular object, the provision of a simple and exceedingly durable mounting of the spring actuated rod or mandrel within and on the body of the underreamer.

The invention consists in the constructions and combinations of parts hereinafter described and more particularly pointed out in the claims, and will be more readily understood by the accompanying drawings in which:

Figure 1 is a side view of an underreamer embodying my invention, the underreamer being shown as projecting just below the shoe of a well casing and a portion of the upper end of the body of the reamer and well casing being omitted, the spring actuated rod or mandrel and bits being shown in dotted lines in expanded or underreaming position. Fig. 2 is a similar longitudinal sectional view showing the underreamer within the well casing and the bits in collapsed position. Fig. 3 is a partial longitudinal sectional view of the body of the underreamer. Fig. 4 is a sectional view on the line x^a-x^a of Fig. 5 of the spring actuated rod or mandrel, and showing the key or gib in dotted lines. Fig. 5 is a side view of the spring actuated rod or mandrel, a portion of the coil spring being indicated thereon. Fig. 6 is a cross sectional view on the line x^b-x^b of Fig. 4 showing the relation of the coil spring and the mandrel or spring actuated rod. Fig. 7 is a perspective view of the key or gib.

In the type of underreamers illustrated, for example, in the patent to Wilson, No. 827,595, dated July 31st, 1906, the spring actuated rod or mandrel upon which the underreamer cutters or bits are carried, is shown as held in the center bore of the body portion of the underreamer by means of dowel-pins. Such construction was found in actual practice to be weak and liable to break, leaving the cutters and spring actuated rod or mandrel in the well hole. To obviate this weakness I provide the body por-

tion 2 above the upper ends of the bits 3 with a slot 4 and correspondingly slot the mandrel or spring actuated rod 13 as at 5. Through these slots 1 project a gib or key 6, the outer ends of the key or gib resting upon the bottom walls of the slots in the body portion and seating thereon. The slot 5 in the spring actuated rod or mandrel 13 is made of sufficient length to permit the necessary or desired reciprocation of the rod or mandrel in the body of the reamer, and in order to secure the proper tension on the spring 7 surrounding such rod or mandrel, I seat the lower end of the spring upon this gib or key and the upper end of the spring is compressed to a suitable degree by means of a nut 8 threaded onto the upper end of the spring actuated rod or mandrel. By adjusting this nut the tension of the spring and consequently the upward throw of the mandrel or rod in the body of the reamer may be regulated at will. This gib or key 6 is loosely mounted in the slot 4 of the mandrel or body, that is to say, it is not attached to said body by any means which mechanically fix it as a part of such body. The tension of the coiled spring 7 holds this key or gib 6 in position so that the wing or downwardly projecting portion 11 seats in the bore 12 of the body and the gib is so proportioned as to permit the passage thereof laterally through the slot 4 after the wing or projection 11 has been raised out of the lower extension of the bore 12. The lower end of this spring actuated rod or mandrel may be provided with wings or prongs 9 forming an integral T-head on which the bits 3 are mounted and tilt or move pivotally. In place of forming this T-head integral with the spring actuated rod, I may provide a slot (not shown) through the rod and utilize a removable key or gib, the ends of which seat in the sockets or key-seats 10 of the bits or cutters. The sockets or key-seats 10 of the bits are preferably somewhat larger than the wings 9, to permit of the necessary tilting action. The gib or key 6 is preferably provided with a wing or downwardly projecting portion 11 of sufficient width to just fit within the bore 12 of the body 2 and thus prevent the accidental displacement of the key. The lower end of the spring actuated rod or mandrel 13 is enlarged as shown, so as to provide flat bearing surfaces 14 for the inner faces at the

upper ends of the bits. Below the slot 4 in the body portion I leave sufficient metal to provide strong seats for the key or gib 6 and below such seats the body portion is formed in a hollow slotted extension 15, the side walls of the slot at each side being provided with dovetails 16 adapted to coact with corresponding dovetails on the bits, as shown in said patent to Wilson.

10 I claim:

1. An underreamer comprising a body having a central bore, a rod or mandrel mounted in said bore, said body provided with a slot, said rod provided with a longitudinal slot, a key or gib mounted in said slot and provided with a downwardly projecting portion adapted to contact with the wall of the central bore below said slot and prevent lateral displacement of the key from either side of the slot, a spring mounted on said gib and operatively connected with said rod, said rod provided at its lower end with a bit engaging head or key.

2. An underreamer comprising a body having a central bore, a rod mounted to reciprocate in said bore, said body and rod provided with slots, a key mounted in said slots, said key having a projection or wing projecting downward from the slot of the body into the central bore and preventing lateral motion of the key, a spring mounted on said key and coiled about said rod, means at the upper end of said rod adjustably connecting said rod and spring, means at the lower end of said rod for engaging and supporting the bits or cutters, and cutters or bits.

3. An underreamer comprising a body having a central bore, a rod or mandrel mounted in said bore, said body and rod provided with registering slots, a key or gib mounted in said slots and having a projection or wing fitting within the bore of said mandrel below said slots and shouldering against the wall upon transverse movement in either direction, a spring mounted on said gib and operatively connected with said rod, said rod provided at its lower end with bit engaging and supporting means, said rod being enlarged at its lower end and provided with surfaces adapted to support the inner ends of the bits or cutters, and bits or cutters mounted on said rod.

4. An underreamer comprising a body having a central bore, a rod or mandrel

mounted in said bore, said body and rod provided with registering slots, a key or gib mounted in said slots, the slot in the rod being of sufficient longitudinal extension to permit the movement of said rod longitudinally of said body, a key or gib loosely mounted in said slots and having a projection or wing projecting downward into the central bore below the walls of the slot in the body and anchoring said key or gib against movement transversely of said body, a spring mounted on said gib and operatively connected with said rod, said rod provided at its lower end with bit engaging means, bits tiltingly carried thereby, and bearings for the inner faces of said bits formed on said rod and adapted to prevent lateral displacement of said bits.

5. An underreamer comprising a body having a central bore, a rod mounted in said bore, said body and rod provided with registering slots, a key or gib loosely mounted in said slots and having means at the bottom for anchoring in said body, a spring surrounding said rod and connected thereto at the top thereof, and operatively connected to said key at its lower end, said rod provided with bit engaging means.

6. An underreamer comprising a body having a central bore, a spring actuated rod mounted in said bore, said rod provided with bit carrying means, and a key loosely mounted in said body and held therein by the tension of said spring.

7. An underreamer comprising a hollow body, a spring actuated rod mounted therein and provided with bit carrying means, and a key loosely mounted in said body and operatively connecting said rod and body.

8. An underreamer comprising a hollow body, a reciprocating rod, a spring and a key operatively mounting said rod in said body, said key fitting loosely in said body and held therein by spring tension on the top, and means preventing the key sliding laterally in the body without overcoming the downward pressure of the spring on the key.

In testimony whereof I have hereunto set my hand at Los Angeles, California, this 12th day of February, 1913.

ROBERT E. BOLE.

In presence of—
FREDERICK S. LYON,
F. A. CRANDALL.

[Complainant's Exhibit "B."]

[Endorsed]: B-19—Eq. U. S. Dist. Court, So. Dist. Cal., So. Div. Bole et al. vs. Wilson & Willard Mfg. Co. et al. Compls. Exh. B. Filed Mar. 24, 1915. Wm. M. Van Dyke, Clerk. Leslie S. Colyer, Deputy. [653]

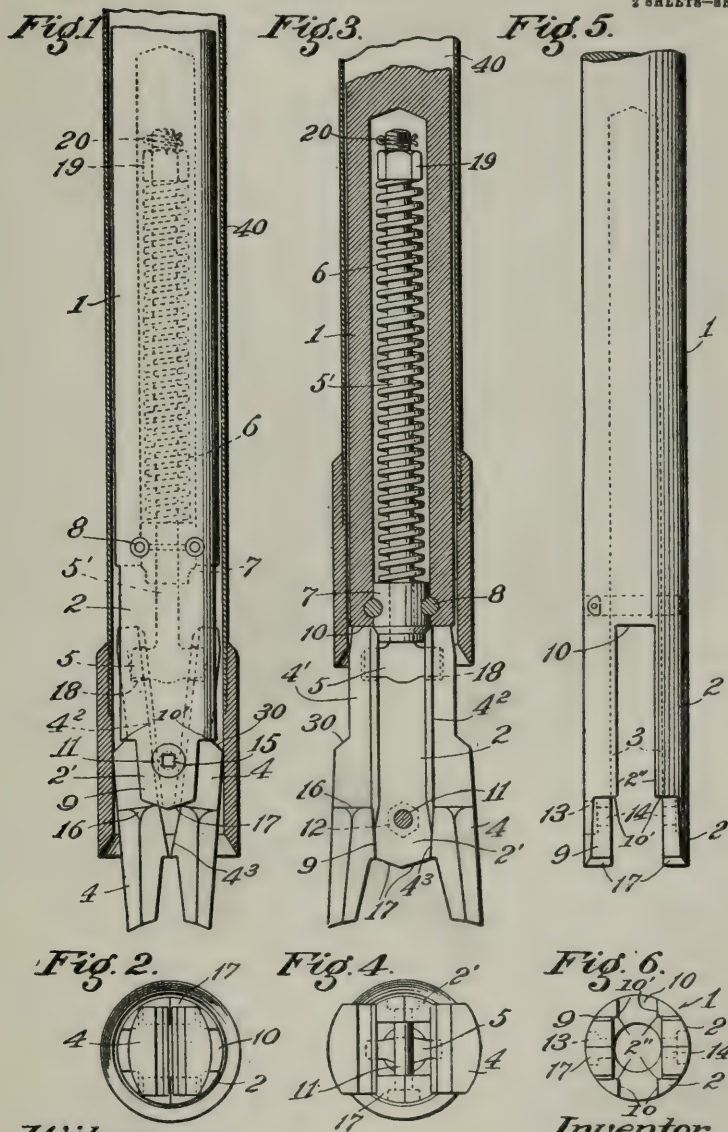
No. 827,595.

PATENTED JULY 31, 1906.

E. C. WILSON.
UNDERREAMER.

APPLICATION FILED NOV. 28, 1905.

2 SHEETS—SHEET 1.



Witnesses:

C. C. Holly
C. J. Williams

Inventor,
Elihu C. Wilson.
By James R. Townsend
his atty

No. 827,595.

PATENTED JULY 31, 1906.

E. C. WILSON.
 UNDERREAMER.
 APPLICATION FILED NOV. 28, 1905.

2 SHEETS—SHEET 2.

Fig. 7.

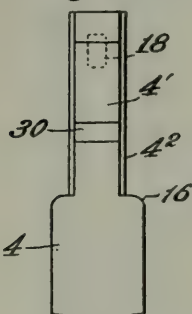


Fig. 8.

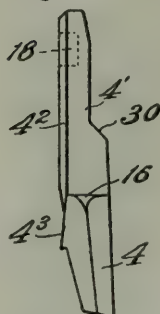


Fig. 9.

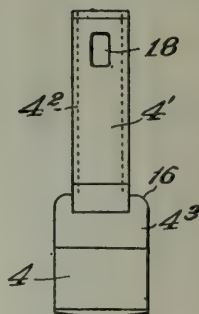


Fig. 10.

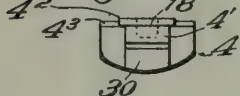


Fig. 11.

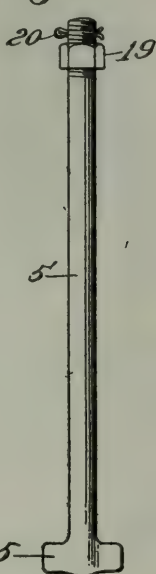


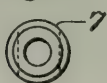
Fig. 12.



Fig. 13.



Fig. 14.



Witnesses:

C. C. Holly
 B. J. Williams

Inventor,

Elihu C. Wilson.

By James R. Townsend
 his atty

UNITED STATES PATENT OFFICE.

ELIHU C. WILSON, OF BAKERSFIELD, CALIFORNIA.

UNDERREAMER.

No. 827,595.

Specification of Letters Patent.

Patented July 31, 1906.

Application filed November 28, 1905. Serial No. 289,380.

To all whom it may concern:

Be it known that I, ELIHU C. WILSON, a citizen of the United States, residing at Bakersfield, in the county of Kern and State of California, have invented a new and useful Underreamer, of which the following is a specification.

Objects of this invention are to provide an underreamer of superior strength and of superior width and expansion of cutters so as to enable reaming as great a portion of the circumference of the hole as possible at each stroke, to insure greater safety against losing the cutters from the body while reaming, to avoid the necessity of a middle joint in the mandrel or reamer body, and to leave a maximum open space between the cutters to receive the loose material or sludge at the bottom of the well or other opening during the operation of drilling.

By this invention it is possible to increase the strength of the cross or T which suspends the cutters.

In this invention a cross or T formed of a single forging is provided for suspending the cutters.

Another decided advantage is simplicity and convenience of attaching and removing the cutters and suspending devices from the reamer-body.

Another advantage is facility of collapsing the cutters. I so construct the mouth of the underreamer as to dispense with stock between the collapsed cutters, thus enabling the cutters to close together. This feature makes extreme expansion possible and makes the use of maximum amount of stock in shanks of cutters possible, thus insuring maximum strength of cutters.

The accompanying drawings illustrate the invention.

Figure 1 is a view of the underreamer in a casing just before it has passed through the shoe of the casing, the parts being collapsed. Fig. 2 is a view looking at the bottom of Fig. 1. Fig. 3 is a view of this newly-invented underreamer in a well, the same having just passed through the casing-shoe and expanded for reaming the hole below. Portions are shown in mid-section. Fig. 4 is a view looking at the bottom of Fig. 3. Fig. 5 is a view of the reamer-body at right angles to Figs. 1 and 2. Fig. 6 is a view looking at the bottom of Fig. 5. Fig. 7 is a front view of a cutter detached. Fig. 8 is an edge view of a cutter at right angles to Fig. 7. Fig. 9 is a

view of the inside or back of the cutter. Fig. 10 is a view looking down on the top of the cutter. Fig. 11 is a view of the cross. Fig. 12 is a view of the cross at right angles to Fig. 11. Fig. 13 is a side view of the spring seat-block detached. Fig. 14 is a bottom view of the same.

1 designates a hollow body of an underreamer terminating in prongs 2, forming a fork, said prongs having shoulders 2' on their inner faces to form ways 3 for cutters. Said prongs are provided with and terminate in downwardly-projecting lugs 2' to spread the cutters apart.

4 designates the cutters, which are interchangeable; 4', the cutter-shank; 4², bearing-shoulders of the cutters to engage inside the ways 3; 4³, expansion bearing-faces of the cutters on the sides of said cutters.

The inner faces of the prongs 2 are parallel, and the sides or shoulders 2', which form the ways 3, are also parallel. The cutter-shank 4' and its bearing-shoulders 4² are straight—that is to say, the sides or edges thereof are parallel and fit the ways 3.

5 is a cross, 5' the stem of the cross, and 6 the spring which actuates the cross. The parts 5 5' constitute spring-actuated means for actuating the cutters to expand the same.

7 is a block forming a seat for the spring 6. One or more dowel-pins 8 may be provided as means for holding the block or spring-seat 7 in place.

9 designates the spreading bearings for holding the cutters 4 apart, and 10 the down-thrust bearings for the cutters. The down-thrust bearings 10' are in the nature of shoulders formed by the edges of the forks at the base of the lugs 2'. The prongs 2 of the body are of substantially one thickness throughout, excepting that they are reduced at their lower ends to form lugs for spreading the cutters 4 apart. The edges of the lugs 2' for the spreading bearings 9 and the prongs terminate abruptly in the shoulders 10' at the base of the lugs 2'. This construction affords the necessary operative structure with maximum strength for minimum weight of body.

11 is a detachable cross-piece in the form of a bolt secured by a nut 12. 13 is an angular socket in the outer face of one of the forks around the bolt-hole 14 in said fork. The nut 12 is conformed to the angular socket, and the bolt 11 is provided with an angular socket 15 in its head to receive a wrench (not shown) for screwing the bolt into the nut.

The expansion bearing-faces 4³ terminate at their upper ends in rounded corners or bearings 16 to ride more readily over the beveled end faces 17 of the downwardly-projecting lugs 2' to engage said bearings for expanding the cutters.

18 designates recesses in the inner faces of the cutters for engaging the ends of the cross 5.

19 and 20 indicate the usual tension-nut for the spring 6 and the cotter-pin for securing the same.

To assemble the underreamer, the block 7 will first be placed on the stem 5' of the cross 5, and the spring 6 is then adjusted and secured in place by the nut 19 and cotter-pin 20. Then the cutters are placed on the ends, respectively, of the cross 5, which seat in the recesses 18 therefor. Then, the parts thus assembled are inserted into the hollow mandrel and brought into the position shown in Fig. 3, whereupon the dowel-pins 8 are inserted and the cross-piece formed of the bolt 11 is then inserted. The nut 12 is placed in its angular socket 13, and the bolt or cross-piece 11 is then screwed home. The underreamer is then in condition for operation.

To use the underreamer, the cutters will be drawn down below the downwardly-projecting lugs 2', thus collapsing the same into the position shown in Fig. 1, whereupon the underreamer will be inserted into the pipe or casing in the usual manner and allowed to descend. When it has passed through the shoe, as shown in Fig. 3, the spring operates in the usual manner to draw the cross 5 up, thus bringing the cutters into the expanded position shown in Fig. 3. The rounded shoulders 16 ride readily over the beveled faces 17, and the upper ends of the cutter-stems seat against the downthrust bearings 10, and the bearing-shoulders 4² of the cutters engage the ways 3 of the fork prongs or members 2, thereby being solidly held during the operation of underreaming. The spreading bearings 9 of the lugs 2' engage the expansion bearing-faces 4³ of the cutters at the same time, so that the tool is practically a unit during the operation of underreaming.

30 designates the usual shoulders on the cutters for drawing the same in when the tool is removed through the pipe or casing 40.

It is advisable that the lower ends of the forks 2 should not form downthrust bearings for the cutters, as there would otherwise be a tendency of crystallization of said forks, which is avoided by making the downthrust bearings at 10 only.

The cross-piece 11 serves as a brace for the prongs of the fork and prevents accidental removal of the cutters and T or cross 5.

It is to be noted that by the construction shown the cutters are quickly expanded at the initial upward movement of the same

after escaping the shoe of the casing 40, and that immediately thereafter the cutters are solidly held in the straight and parallel ways 3, and that when the cutters are fully drawn up they seat on the downthrust bearings 10 and the spreading bearings 9, while the shanks are rigidly held throughout their length. Said spreading bearings are on the lugs 2', which constitute wedges for wedging the cutters apart, and said bearings are at the sides of the lower ends of the body, thus engaging the outer edges of the cutters to hold the cutters apart and leaving an open space between the middle portions of the cutters for a greater distance upward from the lower ends of the cutters than would be the case were the cutters held apart by any intermediate portion between the lugs.

I term the cutters "shouldered cutters," for the reason that the rounded corners 16, which extend away from the shank at right angles thereto, are in the nature of shoulders, the inner faces 4² of which engage the spreading faces 9 of the side lugs 2' to brace the cutters and hold them apart.

What I claim is—

1. An underreamer-body terminating in prongs having projecting lugs at their lower ends with spreading bearings 9 for holding the cutters apart.

2. An underreamer-body terminating in prongs and provided with upper and lower bearings for the cutters, said prongs having projecting lugs, the edges of which form lower bearings for holding the cutters apart, and the ends of said lugs having beveled end faces.

3. An underreamer-body terminating in prongs the inner faces of which are provided with straight parallel ways, the ends of said prongs terminating in lugs below said ways to spread and hold the cutters apart.

4. An underreamer-body terminating in prongs forming a fork, said prongs having shoulders on their inner faces to form ways for the cutters.

5. A hollow underreamer-body terminating in prongs forming a fork having shoulders on the inner faces to form ways for the cutters, cutters in said ways, a cross in said hollow body for operating said cutters, a spring for operating the cross, a block in the body to form a seat for said spring, and one or more dowel-pins securing the block in place.

6. A hollow underreamer-body, cutters, a cross inside the hollow body for operating said cutters, a spring for operating said cross, a block in said body forming a seat for said spring, and one or more dowel-pins for holding the block in place, said block and pins being located entirely above the head of the cross.

7. A hollow underreamer-body terminating in prongs forming a fork and provided with ways and downthrust bearings for cut-

ers, cutters in said ways engaging said bearings, a cross for operating said cutters, a spring for actuating said cross, a block forming a guide for the stem of the cross and a seat for the cross-actuating spring, its lower end terminating above the head of the cross and projecting below the downthrust bearings to hold the upper ends of the cutters apart, and means for holding the block in the reamer-body.

8. A hollow underreamer-body terminating in prongs forming a fork, said prongs having shoulders on their inner faces to form ways, cutters in said ways, means for operating the cutters, and a detachable cross-piece connecting the ends of the fork.

9. An underreamer-body terminating in prongs forming a fork and provided with shoulders on the inner faces of the prongs which form cutter-ways and terminate in downwardly-projecting lugs, and cutters mounted between the prongs of said fork and having shoulders inside the fork and faces to bear on the projecting lugs.

10. An underreamer-body terminating in prongs having projecting lugs at their lower ends to hold the cutters apart.

11. An underreamer-body terminating in prongs forming a fork having beveled faces at the ends of its prongs, cutters having shoulders to ride over said beveled faces, and means for suspending said cutters in said body.

12. An underreamer-body terminating in prongs forming a fork, the ends of said prongs being provided with lugs to spread the cutters apart.

13. An underreamer-body terminating in prongs forming a fork, said prongs having shoulders on the inner faces to form ways for the cutters, and said prongs terminating in lugs to act as spreaders for the cutters.

14. A hollow underreamer-body terminat-

ing in prongs forming a fork, said prongs terminating in lugs for spreading the cutters, said lugs having beveled ends to engage bearings on cutters to expand cutters.

15. An underreamer-body terminating in prongs forming a fork, said prongs terminating in lugs or projections, said lugs having beveled faces or bearings to expand the cutters, and also faces or bearings for the cutters to rest on after they have expanded to a normal position for reaming.

16. An underreamer-cutter having two shoulders and a bearing-face on the inner side of each of the two shoulders of the cutter.

17. An underreamer-cutter having a shank and a shoulder on either side of the shank of the cutter, each of said shoulders projecting at right angles to the shank of the cutter and having a bearing-face on its inner side.

18. An underreamer having a body terminating in a fork, and cutters suspended between the prongs of the fork, the ends of said prongs constituting wedges to wedge between the cutters.

19. An underreamer comprising a body terminating in two prongs, and cutters each having two shoulders and a bearing-face on the inner side of each of the two shoulders to engage said prongs.

20. An underreamer comprising a body terminating in prongs the inner faces of which are provided with straight parallel ways, and cutters having straight shanks fitting said ways, the ends of said prongs terminating in lugs below said ways to spread and hold the cutters apart.

In testimony whereof I have hereunto set my hand at Bakersfield, California, this 20th day of November, 1905.

ELIHU C. WILSON.

In presence of—

H. I. TUPMAN,
T. E. KLOPSTEIN.

Dean Dyer

Dear friend

My mother's night

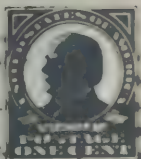
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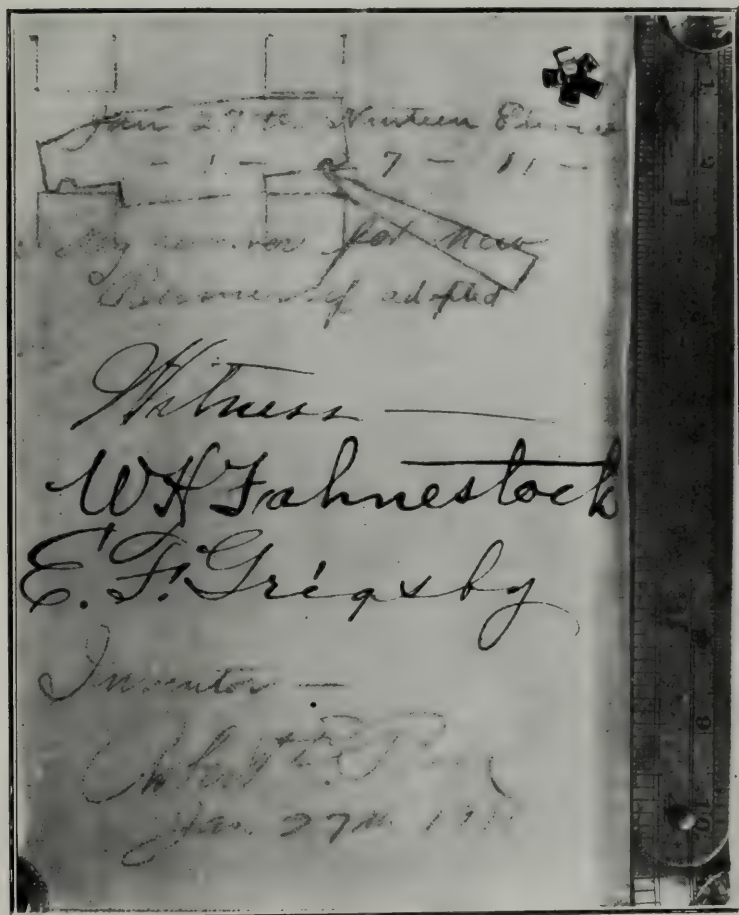
W. S. Pattee of
Laurel, Md.

Att: Paula S. 3/1/02

Order Exhibit 106-1000

Hotel and
Apartment

Sept. 21, 1918
History, Illinois



[Complainants' Exhibit "E"—Sketch on Linen,
"Bole's Exhibit, January 27, 1911, Sketch."]

Docket Clerk.

Nov. 16, 1914.

U. S. Patent Office.

U. S. Patent Office. In re Elihu C. Wilson vs. Robt. E. Bole. Interference No. 37,126. Bole's Exhibit January 27, 1911. Sketch. I. Benjamin, Notary Public. Sept. 21, 1914.

B-19-Eq. U. S. Dist. Court, So. Dist. Cal., So. Div. Bole et al. vs. Wilson & Willard Mfg. Co. et al. Compls. Exh. "E." Filed Mar. 26, 1915. Wm. M. Van Dyke, Clerk. Leslie S. Colyer, Deputy.

[Endorsed]: People's Ex. "A." Filed Dec. 1, 1914. Frank S. Forbes, Justice of the Peace. H. J. Bille. Edgar E. Stechnill, 1-2-3-4. E.10. E.25 Art. [662]

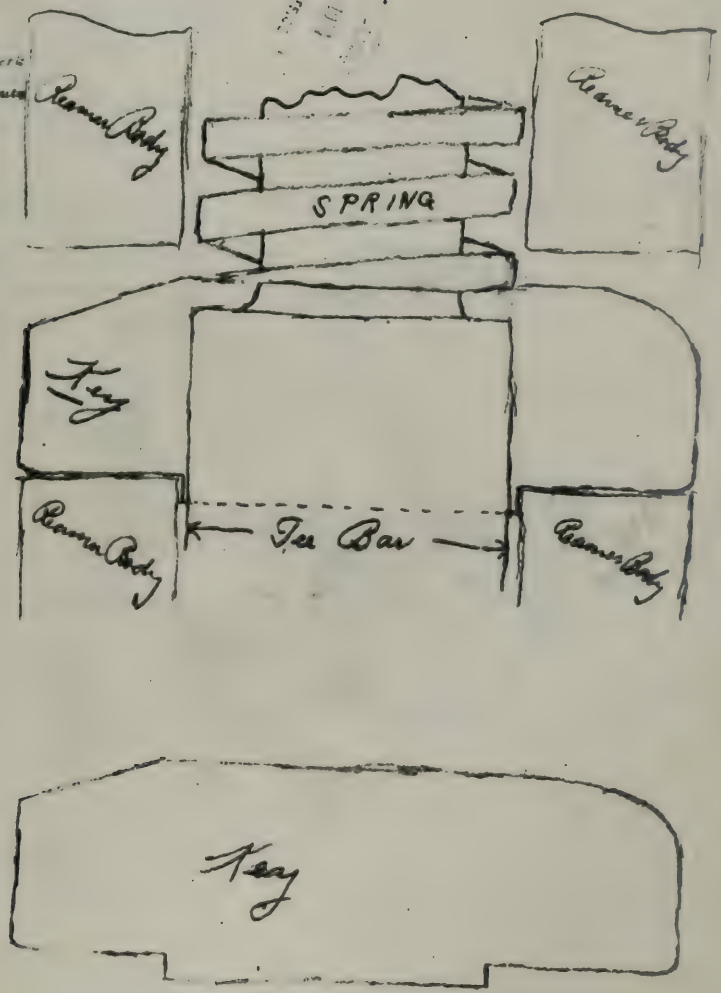
B19 Eq.
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Lo. Dist
No Co et al.
W. Wilson Willard
W. G. Co et al.
Camp Co. Ex F.

Boles Exhibit Reproduction of
Monarch Order sketches
Sept 21, 1914
H. P. Bryan
Notary Public

FILED

MAR 21 1915

Wm. M. Van Dyke, Clerk
Joseph S. Galt, Deputy



B19 Eq.

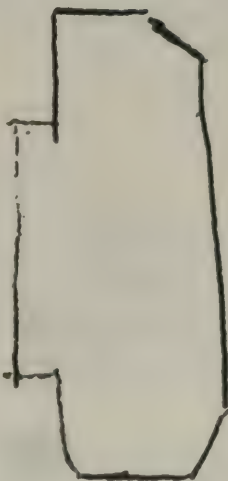
U. S. Dist. Court
So. Dist. Cal.
St. Div.

Boate et al.

^{vs.}
Wilson & White and
Mfg. Co. et al.
Compls' Exh. H.

FILED

^{U. S.} Clerk's
Lester S. Coyle, Deputy



**[Complainants' Exhibit "I" — Certified Copy
Records of Patent Office, Reasons of Appeal and
Notice of Hearing, Wilson vs. Bole.]**

2-390.

UNITED STATES OF AMERICA,

Department of the Interior,

United States Patent Office.

To all to whom these presents shall come, Greeting:

THIS IS TO CERTIFY that the annexed is a true copy from the Records of this Office of the Reasons of Appeal, filed March 23, 1915, and Notice of Hearing dated March 25, 1915, in the matter of

Interference,

Wilson vs. Bole,

Subject-Matter:

Under-reamer.

Number 37,126. B-19-Eq. U. S. Dist. Court, So. Dist. of Cal., So. Div. Robt. E. Bole et al. vs. Wilson & Willard Mfg. Co. et al. Compl's Exh. I. Filed Apr. 12, 1915. Wm. M. Van Dyke, Clerk. By Leslie S. Colyer, Deputy.

IN TESTIMONY WHEREOF I have hereunto set my hand and caused the seal of the Patent Office to be affixed at the City of Washington, this 29th day of March, in the year of our Lord one thousand nine hundred and fifteen and of the Independence of the United States of America the one hundred and thirty-ninth.

[Patent Office Seal.]

J. T. NEWTON,
Acting Commissioner of Patents.

10¢ Internal Revenue Stamp canceled Mar. 29.
U. S. Patent Office. [665]

Intf. No. 37,126. Paper No. 62.

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CHIEF CLERK U. S. PATENT OFFICE.

DOCKET CLERK.

MAR. 24, 1915.

U. S. PATENT OFFICE.

UNITED STATES PATENT OFFICE.

ELIHU C. WILSON,

vs.

ROBERT E. BOLE.

Interference No. 37,126.

UNDERREAMERS.

To the Commissioner of Patents,

Sir: I hereby appeal to the Examiners-in-Chief from the decision of the Examiner of Interferences dated March 20, 1915, in the matter of the above-entitled interference, in which priority of invention was awarded to Elihu C. Wilson, the junior party. The following are assigned as the reasons of appeal:

1. The Examiner of Interferences erred in holding that the testimony of the witnesses Heber and Adams in regard to the disclosure of the invention to them by Bole in September, 1908, "does not carry conviction."

2. The Examiner of Interferences erred in hold-

ing that the testimony of Willard regarding Bole's order of September, 1908, is so contradictory as to be of little value in determining who was the inventor of the device in controversy.

3. The Examiner of Interferences erred in holding that the suggestion made by Bole at the conference on February 3, 1911, that the key could be removed by prying it out, does not indicate such knowledge of the invention in issue on the part of Bole as to denote prior conception of the same, and does not negative an independent conception [666] of the invention by Wilson. The Examiner furthermore erred in holding that this evidence does not point to the conclusion urged (by Bole), but that at most it merely indicates that Wilson had not worked out all the details of the invention, and that Bole suggested one of the details.

4. The Examiner of Interferences erred in holding that another circumstance which limits Bole's claim to the key removing tool rather than the key itself is his "Exhibit January 27, 1911, Sketch."

5. The Examiner of Interferences erred in holding that Bole's "Exhibit January 27, 1911, Sketch," is not proved to have been witnessed by Fahnestock and Grigsby or disclosed to anyone at the date noted thereon or at any date prior to the alleged conference of February 3, 1911.

6. The Examiner of Interferences erred in holding that the testimony of Houriet and Wills was proper rebuttal testimony, and in denying Bole's motion to strike out said testimony.

7. The Examiner of Interferences erred in hold-

ing that the absence of the original shop order obtained by Bole in September, 1908, and the key sketch which must have accompanied the shop orders for the construction of the first underreamer embodying the invention, "is not sufficient to discredit the positive testimony of the witnesses or to alter their conclusions arising from the other circumstances of the case."

8. The Examiner of Interferences erred in holding that of all the witnesses for Wilson, only Willard and Wilcox testify that Bole asserted any claim to the invention prior to January, 1913, "and these witnesses testify positively [667] that such claim by Bole was not made until sometime after the Wilson under-reamer with the invention embodied therein had been manufactured and placed on the market and its success assured."

9. The Examiner of Interferences erred in holding that "when all of the circumstances of the case are considered, the evidence clearly establishes Wilson and not Bole as the original inventor."

10. The Examiner of Interferences erred in awarding priority of invention of the subject-matter in issue to Elihu C. Wilson, the junior party.

11. The Examiner of Interferences erred in not awarding priority of invention of the subject-matter in issue to Robert E. Bole, the senior party.

An oral hearing is requested.

The appeal fee of \$10.00 is enclosed herewith.

Respectfully,

ROBERT E. BOLE,

By C. A. MASON,

Associate Attorney.

Washington, D. C., March 23, 1915.

C.M.S.

E.E.G. [668]

#2-201.

Paper No. —.

Address only

The Commissioner of Patents.

Washington, D. C.

Department of the Interior.

UNITED STATES PATENT OFFICE.

Washington.

RECEIVED

Mar. 26, 1915.

C. A. MASON,

Solicitor of

Patents.

March 25, 1915.

Sir:

~~Serial~~

The case of Wilson vs. Bole. Intf. No. 37,126,

~~Commissioner~~

will be heard by the Examiners-in-chief on the 7th day of May, 1915.

~~ten~~

The hearings will commence at (one) o'clock, and as soon as the argument in one case is concluded the succeeding case will be taken up.

If any party, or his attorney, shall not appear when the case is called, his right to an oral hearing will be regarded as waived.

The time allowed for arguments is as follows:

Ex parte cases, thirty minutes;

Motions, thirty minutes, each side;

Interference appeals, final hearing, one hour each side.

By special leave, obtained before the argument is commenced, the time may be extended.

The appellant shall have the right to open and conclude in interference cases, and in such case a full and fair opening must be made.

Briefs in interference appeals must be filed in accordance with the provisions of Rule 147.

Respectfully,

THOMAS EWING,

Commissioner of Patents.

To C. A. Mason, Asso. Atty.,

McGill Bl'd'g.,

Washington, D. C.

To _____

6-1961 [669]



A. J. Dist. Court
 Southern District of California
 Southern Division
 Robert E. Hale et al
 vs
 Nelson & Wallace Jeffers et al
 1915

John's Exhibit Note Book
 Feb 13. 1915.

Couple's Exh.
 (as above)
 H. Grayson
 Mary Public
 7-11

Apr. 12, 1915

Wm M. Van Dyke
 By Leslie S. Cochrane
 Deputy

Exh. int-
 tached to clpf.
 of Roy L. Hibel

In the United States Patent Office,

E.C. Wilson } In re Interference
Robert E. Ryle } No. 37126.

Wilson Exhibit Photo A of Wilson
Reamer 2-piece Key Drive
May 28, 1914

Attest
Notary Public

U.S. Dist. Court
S.D. Cal.
S.D. Cal.

FILLED
Ryle

Attest
My Co.
St. L.

MAR 23 1915

Wm. M. Van Dyke, Clerk
Sealed by Deputy

Sealed by
(as above)





In the United States Patent Office 13

C. C. Wilson } In re. Interference
Robert E. Poole } No 37,126

Wilson Exhibit Photo A of Wilson
Reaver 2-piece Key Device

May 28, 1914 J. Brynner
Attorney at Law

DOCKET CLERK
NOV 16 1914

No. 319 E.
U.S. Dist. Court
S.D. Dist. of Cal.
S. O. Ditt.
Bolschal
Wm. H. Willard
M. G. Co. & Co.

FILED

MAR 23 1915

of the U.S. Dist. Ct.
(see above)
J. M. T. Dyer, Clerk
Federal Bldg. & Court House

[Defendants' Exhibit—Wilson Exhibit, Pacific Iron Works Letter of January 28, 1911.]

RECEIVED

Jan. 30, 1911.

Ans'd, M&M.

PACIFIC IRON WORKS.

Manufacturers of

Oil Well Tools and Fishing Tools,
General Repairs and Machine Work,
Automobile Repairing and Supplies.

McKittrick, Cal., Jan. 28, '11.

Mess. Wilson & Willard Mfg. Co.,

Los Angeles, Calif.

Gentlemen:

Your favor of the 26th addressed to our Mr. Williams received. In reply, the writer wishes to state that he remembers distinctly the conversation *referred* to regarding Slotted Tee for your Underreamer.

I wish to *emphasis* the fact that I consider this form of Tee far superior to what you call your Side Screw Type, the Spring being much easier set and the Screws not giving near the trouble to loosen and take the Reamer apart. I have had practical demonstration of this form of Reamer by owning and operating two of this type. Will further state that this is the pattern Manville Tee that has just been broken, and we feel that it was not the fault of the construction, as Underreamer was used to pull in and drill up one joint of heavy 12½" casing, and the driller

informed me that nothing was spared as far as was possible to save the Underreamer in any way. When the Tee broke, the Cutters simply dropped to the safety bolt, and the Tool was pulled out with nothing lost.

We are satisfied if you would return to this form of Manville Tee, and construct same according to specifications you name, that is using Nickle Steel and making heavier Manville Tee, we think your Underreamer will become far more popular. As to comparing it with any other type will state [673] I have had no experience with any of these machines as I have considered the Wilson Underreamer the best in the market, and have made a specialty of it, owing at the present time, four, from the 6" to the 12½", the largest size pipe we use in this field.

We think you have solved in a measure one of the principal reasons why your Underreamer has the ungrounded prejudice you mention and which has been so *noticable* in the past.

With the improvement contemplated and a little missionary work among the users of your Tool, we feel that you will have no trouble in obtaining your share of the business.

Very truly,

PACIFIC IRON WORKS,

HSW-EAH.

H. S. WILLIAMS, Mgr.

[Endorsed]: In the United States Patent Office. E. C. Wilson v. Robert E. Bole. In re Interference No. 37126. Wilson Exhibit Pacific Iron Works Letter of Jan. 28, '11. May 28, 1914. I. Benjamin, Notary Public. B-19-Eq. U. S. Dist. Court, So.

Dist. Cal., So. Div. Bole et al. vs. Wilson & Willard Mfg. Co. et al. Defts.' Exh. (as above). Filed Mar. 23, 1915. Wm. M. Van Dyke, Clerk. Leslie S. Colyer, Deputy.

Docket Cl. —.

Nov. 16, 1911.

U. S. Patent Office. [674]

[Defendants' Exhibit 2—Two Shop Orders, Wilson & Willard Manufacturing Company to Pacific Iron Works, 1-26-1911.]

—r Received From	Shop Order, Wilson & Willard Mfg. Co.	Order No. 6775
Purchaser's Order No.	Date 1-26-1911.	
E. C. W. Salesman.	Charge to Pacific Iron Works, Ship to McKittrick, California. Via Express Today.	Foreman's O. K.
	Ship via.	

1 12-1/2" Slotted Tee, with Nut.

(28) Shipped 1/26-11
Sentry S. P. Exp.
Grigsa.

Delivered Sentry

Ex
Date 1/26/11
O. K. _____
Date 1/27/11
Foreman K. [675]

—der Received From	Shop Order, Wilson & Willard Mfg. Co.	Order No. 6775
Purchaser's Order No.	Date 1-26-11.	
Salesman	Charge to Pacific Iron Wks.	Foreman's O. K.
E. C. W.	Ship to McK. _____ Ship via Express—Today.	
	1—12 1/2" x Slotte d Tee with Nut.	

[Endorsed]: B-19—Eq. U. S. Dist. Court, So. Dist. Cal., So. Div. Bole et al. vs. Wilson & Willard Mfg. Co. et al. Defts. Exh. 2. Filed Mar. 23, 1915, Wm. M. Van Dyke, Clerk. Leslie S. Colyer, Deputy. [676]

THIS MEMORANDUM

is an acknowledgment that a bill of lading has been issued and it is not the Original Bill of Lading, nor a copy or duplicate, covering the property named herein, and is intended solely for filing or record.

Shippers No.

Agents No.

RECEIVED, subject to the classifications and tariffs in effect on the date of the receipt by the carrier of the property described in the Original Bill of Lading.

the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said Company agrees to carry to its usual place of delivery at said destination, if on his road, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the conditions, whether printed or written, herein contained (including conditions on back hereof) and which are agreed to by the shipper and accepted for himself and his assigns.

The Rate of Freight from

to _____ is in Cents per 100 Lbs.

IF _____ Times 1st	IF 1st Class	IF 2d Class	IF 3d Class	IF 4th Class	IF 6th Class	IF A Class	IF B Class	IF C Class	IF D Class	IF E Class
--------------------	--------------	-------------	-------------	--------------	--------------	------------	------------	------------	------------	------------

(Mail Address—Not for purposes of Delivery.)

Consigned to

Destination

Route

Car Initial

Car No.

[illegible]

Agent or Cashier.

Per

(The signature here acknowledges only the amount prepaid.)

Charges Advanced:

Shipper.

Agent

Per.

Per

U.S. Patent Office

June } Interference
1880 }
2d } No. 97124

Wm. E. B. R.
Specimen of Graphis
Hautwuthy

Oct. 9. 1874

CONFIDENTIAL

33821

NO

FILLED
MAR 23 1915

Wm. M. Van Dyke, Clerk
Leah L. Boyer Deputy

204

CONDITIONS

Sec. 1. The carrier or party in possession of any of the property herein described shall be liable for any loss thereof or damage thereto, except as hereinafter provided.

[illegible]

Sec. 2. In issuing this bill of lading this Company agrees to transport only over its own line, and except as otherwise provided by law this only as stated with respect to the portion of the route marked by oval box.

No carrier shall be liable for loss, damage, or injury to property as its own load or its portion of the through load, but after said property has been delivered to the next carrier, except as such liability is or may be imposed by law, but nothing contained in this bill of lading shall be deemed to exempt the initial carrier from any such liability as imposed.

Sec. 2. No driver is bound to transport and deliver by any particular train or vessel, or at any time for any particular market, or otherwise than with reasonable dispatch, unless by specific agreement in writing hereon. Every carrier shall have the right in case of physical necessity to forward said property by any railroad or route between the point of shipment and the point of destination; but if such diversion shall be from a rail to a water route the liability of the carrier shall be the same as though the entire carriage were by rail.

The amount of any loss or damage for which any carrier is liable shall be computed on the basis of the value of the property (being the base-rate invoice price, if any, to the consignee, including the freight charges, if prepaid) at the place and time of shipment under this bill of lading, unless a lower value has been represented in writing by the shipper or has been agreed upon or is determined by the classification or tariff upon which the rate is based, in any of which events such lower value shall be the maximum amount to govern such computation, whether or not such loss or damage occurs from theft.

Claims for loss, damage, or delay must be made in writing to the carrier at the point of delivery or at the point of origin within four months after delivery of the property, or, in case of failure to make delivery, then within four months after a reasonable time for delivery has elapsed. Unless claims are made the carrier shall not be liable.

Any carrier or party liable on account of loss of or damage to any of said property shall have the full benefit of any insurance that may have been effected upon or on account of said property, so far as this shall not avoid the policies or contracts of insurance.

Sec. 4. All property shall be subject to necessary cooerage and
tolling at owner's cost. Each carrier over whose route cotton is to be trans-
ported hereunder shall have the privilege, at its own cost and risk, of com-
pensating the same for greater convenience in handling or forwarding, and

shall not be held responsible for deviation or unavoidable delays in processing such compression. Grain in bulk consigned to a point where there is a railroad, public, or licensed elevator, may (unless otherwise expressly stated herein, and then if it is not promptly unloaded) be there delivered and placed with other grain of the same kind and grade without respect to ownership, and if so delivered shall be subject to a lien for elevator charges in addition to all other charges hereunder.

Sec. 5. Property has been removed by the party entitled to receive it within forty-eight hours (exclusive of legal holidays) after notice of the arrival has been duly sent or given may be kept in car, depot, or place of delivery of the carrier, or warehouse, subject to a reasonable charge for storage and to carrier's responsibility as warehouseman only, or may be, at the option of the carrier, removed to and stored in a public or bonded warehouse at the cost of the owner and there held at the owner's risk and without liability on the part of the carrier, and subject to a lien for all freight and other lawful charges, including its reasonable charges for storage.

The carrier may make a reasonable charge for the detention of any vessel or car, or for the use of trucks after the car has been held forty-eight hours (exclusive of legal holidays), for loading or unloading, and may add such charge to all other charges to be made and held such property subject to a lien therefor. Nothing in this section shall be construed as lessening the time allowed by law or as setting aside any local rule affecting car service or storage.

Property delivered to or taken from a station, wharf, or landing at which there is no regularly appointed agent shall be entirely at risk of owner after unloading from cars or vessels or until loaded into cars or vessels, and when received from or delivered as agents or other officials, wharves, or landings shall be at owner's risk until the cost is attached to and after they are detached from train.

Sec. 2. No carrier will carry or be liable in any way for any documents, specie, or for any articles of extraordinary value not specifically noted in the published classification or tariffs, unless a special agreement to do so and a stipulated value of the articles are entered herein.

Sec. 7. Every party, whether principal or agent, shipping explosive or dangerous goods, without previous full written disclosure to the carrier of their nature, shall be liable for all loss or damage caused thereby, and such goods may be warehoused at owner's risk and expense or destroyed without compensation.

Sec. 2. The owner or consignee shall pay the freight and all other lawful charges accruing on said property, and, if required, shall pay the same before delivery. If upon inspection it is ascertained that the articles shipped are not those described in this bill of lading, the freight charges must be paid upon the articles actually shipped.

Sec. 8. Except in case of diversion from rail to water route, which is provided for in section 3 hereof, if all or any part of said property is carried by water over any part of said route, such water carriage shall be performed subject to the liabilities, limitations, and exemptions provided by statute and to the conditions contained in this bill in respect with respect to the property, and shall be subject to the condition that no carrier or party in possession shall be liable for any loss or damage resulting from the perils of the lakes, sea, or other waters; from explosion, burning of boilers, breakage of shafts, or any latent defect in hull, machinery, or appurtenances; or from collision, stranding, or other accidents of navigation, or from prefrigation of the voyage. And any vessel carrying any such property shall be subject to the liberty to stop at intermediate ports to take and to land, and make vessels to disburse, and to deviate for the purpose of saving life or property.

The term "water carriage" in this section shall not be construed as including lighterage across rivers or in lake or other harbors, and the liability for such lighterage shall be governed by the other sections of this instrument.

Sec. 10. Any alteration, addition or erasure in this bill of lading which shall be made without an indorsement thereof hereon, signed by the agent of the carrier issuing this bill of lading, shall be without effect, and this bill of lading shall be enforceable according to its original tenor.

CHIEF

MAR 23 1915

Wm. M. Van Dyke, Clerk
F. L. Polyer, Donor

**[Defendants' Exhibit—Wilson Exhibit, Putnam &
Valentine Paid Photograph Account.]**

STATEMENT.

Telephones: Sunset Broadway 1950.

Home, A.2600.

Los Angeles, Cal., Aug. 1, 1911.

M. Wilson Mfg. Co.,
 15th S. Fe.

Bought of PUTNAM & VALENTINE, Photogra-
phers, 208 North Spring St., Temple Block.

(P&V)

All bills subject to sight draft at 60 days, Interest charged thereafter.

June 24 To Bal. Acct. rendered....18.00

28 “ Mdse..... . 3.00

\$21.00

Ck. 6378.

Please remit & oblige

P. & V.

PAID

9/1/11

PUTNAM & VALENTINE.

Per G. V. [679]

Terms Cash. All bills subject to sight draft at 60 days. Interest charged thereafter.

P. & V.

Western Scenic Pictures.

The standard line of Pacific Coast Photographs.

All claims for errors or shortage must be made immediately upon receipt of goods.

Manufacturers and Wholesalers of Photographic Novelties, Enlargements, Lantern Slides, etc.

PUTNAM & VALENTINE.

Photographers.

208 North Spring Street.

Temple Block.

Los Angeles, Cal., June 24, 1911.

Telephones: Sunset Broadway 1950.

Home A-2600.

Wilson Mfg. Co.,

15th & St. Fe Ave.

Shipped by

12 8/10 photo.....1.50 \$18.00
Ck. 6378.

Reamer a/c.

We do commercial photography of every kind.

[Endorsed]: In the United States Patent Office. E. C. Wilson v. Robert E. Bole. In re Interference No. 37,126. Wilson Exhibit Putnam & Valentine Paid Photograph Account. May 29, 1914. I. Benjamin, Notary Public. B-19—Eq. U. S. Dist. Court, So. Dist. of Cal., So. Div. Robt. E. Bole et al. vs. Wilson & Willard Mfg. Co. et al. Defts. Exh. (as above). Filed Mar. 23, 1915. Wm. M. Van Dyke, Clerk. Leslie S. Colyer, Deputy. [680]

16704

DUPLICATE

No 22906

WESTERN LITHOGRAPH CO.

SOLD TO

Wilson & Holland Mfg Co

13 E 7th St New

TELEPHONES

HOME A-1652

MAIN 6007

SHIPPED TO them

AT

HOW SHIPPED

by FT.

EXP. F.O.B.

PREPAID

C.O.D.

In the United States Patent Office

E. C. Wilson

In re Reference

No. 371-6

Robert E. Hale

Wilson Exhibit Wilson

Resumer Booklet of 1911

Delivery Slip.

May 29, 1914

J. H. H. H. H.

Notary Public

U. S. Dist. Court
So. Dist. Cal.

So. Dist.

W. C. Hale

Wilson & Holland Mfg Co.

FILED

MAK

Leah & Co.

KEEP THIS MEMO TO CHECK WITH INVOICE

[Defendants' Exhibit—Bole's Exhibit, W. W. Wilson Cross-Examination Exhibit 1 for Identification, Agreement Between Robert E. Bole Pump Company and Wilson & Willard Manufacturing Company.]

Docket Clerk.

Nov. 16, 1914.

U. S. Patent Office.

AGREEMENT.

THIS AGREEMENT made and entered into this 1st day of February, 1913, by and between the Robt. E. Bole Pump Company, not a corporation, party of the first part, and the Wilson & Willard Mfg. Company, party of the second part, witness:

WHEREAS the party of the first part is desirous of making settlement of its account with the part — of the second part, and whereas the said part — of the first part desires to have attachment released and management of its properties recovered, said party of the first part agrees as follows to pay:

Said party of the second part Five Thousand (\$5000.00) Dollars to be paid as follows:

One thousand (\$1000.00) Dollars cash on February 1st, 1913.

One thousand (\$1000.00) Dollars cash on February 3rd, 1913.

Three thousand (\$3000.00) Dollars cash on March 1st, 1913.

It is further agreed that said party of the first part shall assume all expenses in the attachment proceedings incurred except the attorney's fees of

the said party of the second part in the attachment proceedings now pending against the party of the first part. Said fees and expenses to be paid not later than March 1st, 1913. In further consideration the said party of the second part agrees to release said attachment and dismiss the action.

Said party of the first part also agrees that all of the Bole Pumps, both finished and unfinished, and all materials used in the manufacture thereof, all fittings for same, together with all other tools, machinery, accounts receivable, automobiles, and all other properties belonging to the party of the first part shall remain intact until the final payment of the three thousand [681a] (\$3000) Dollars and expenses of attachment suit to be made on March 1st, 1913, other than such disbursements as may be necessary to meet the sales and to care for all manufacture of said pumps as will be necessary to care for the current demands during the period between February 1st, 1913, and the date of final payment.

It is further agreed that said party of the first part shall have the right to mortgage any or all of the properties both real or personal belonging to said party of the first part during the time in agreement between February 1st and the date of final payment, such mortgage to be approved by party of the second part before execution.

It is further agreed that A. G. Willard of the Firm of Wilson & Willard Mfg. Company to be granted the privilege of either keeping the accounts of the said Bole Pump Company, party of the first part, or to have the privilege of inspecting same, and to

be furnished by the party of the first part all data concerning sales, deliveries, collections, and expenses incurred during the time intervening and up to the time of final payment.

After said final payment the said party of the second part hereby relinquishes any claim whatsoever, or any right to inspect the accounts of, or to in any wise have any interest whatever in the properties of the said Bole Pump Company, party of the first part.

Said party of the second part hereby acknowledges receipt of the first one thousand (\$1000.00) Dollars payment.

THE ROBERT E. BOLE PUMP CO.,

By ROBERT E. BOLE,

Party of the First Part.

WILSON & WILLARD MFG. CO.,

Per E. C. WILSON, President.

Party of the Second Part.

Party of the Second Part.

Witnessed by

WM. H. FAHNESTOCK.

W. W. WILSON.

WILSON & WILLARD MFG. CO.

PAID, Feb. 14, 1913.

Per A. G. WILLARD. [682]

[Endorsed]: In U. S. Patent Office. E. C. Wilson v. Robert E. Bole, in Interference No. 37,126. Boles Exhibit W. W. Wilson Cross-examination Exhibit 1 for Identification. June 22, 1914. I. Benjamin, Notary Public. B-19—Eq. U. S. Dist. Court, So.

Dist. Cal., So. Div Bole et al. vs. Wilson & Willard
Mfg. Co. et al. Defts.' Exh. (as above). Filed
Mar. 23, 1915. Wm. M. Van Dyke, Clerk. Leslie
S. Colyer, Deputy. [683]

**[Defendants' Exhibit—Wilson Exhibit, Bole Letter
of January 17, 1913.]**

Los Angeles Bakersfield Coalinga Taft
THE ROBERT E. BOLE PUMP COMPANY.
2411 East 15th Street,
Coalinga,

Docket Clerk.

Nov. 16, 1914.

U. S. Patent Office.

~~Los Angeles~~, Cal., Jan. 17th, 1913.

RECEIVED

Jan. 16, 1913.

Ans'd. ———

E. C. Wilson, Pres.,

Wilson and Willard Mfg. Co.,

Los Angeles, Cal.

Dear Sir:

Your several letters received and will say that
it has taken me some time to get to a frame of mine
where I could answer them at all.

Your letters and telephone message point to one
of two things, either that your financial troubles
have gone to your head or else the only other alter-
native that you are a crook and I want to inform
you here and now that I will not be a party to any
crooked deals and when the notes from the Zier Oil

Co. arrive, if I can get them discounted I will do so and the money will go to pay my accounts the Bole Pump Co. may owe and which are due for payment.

Now I have notified you time and again to let my business alone and to let the men who are working for me alone and this last act of yours in writing letters and signing the name of the Bole Pump Co. and sending them to the different oil companies without any authority whatever is, I believe, a criminal offence and as soon as I can estimate the damage done by you by reason of these letters I will let you know.

Now as to our taking stock for you I cannot see that it is any of your business what our stock is and as to my *asking* [684] you in my letter to do at least one thousand dollars worth of work on three-inch and two-inch pumps, you seem to be trying to make me understand that you are doing me a favor by accepting this work. If you do not wish to do any more work for me all you have to do is say so and I will take the work to some other shop or else arrange to do it in my own shop. Again as to this *asking* for \$1000.00 worth of work which you mention in yours of Jan. 14th. Why this sudden change on your part? A few months ago when I wanted to lay off men in the shop and not work up my stock any faster than it was sold you begged me to have the work done in order to give the shop something to do and said then that if I would give your firm the work you would do it just as cheap and good as anyone else, would guarantee all work, that you would purchase any machines, buy any material, ex-

tend my credit and to use almost your exact words, "Bob, it has been a dandy little business. Give us the work and if in giving it to us it should run you in debt, take all the credit and time you want and if the price is not right we will make it right. We will do this work as cheap and as good as any other company and guarantee it." Again I ask you, why this sudden change on your part?

In reference to your insulting letter of Dec. 31st to our Mr. Hubbard will say that Mr. Hubbard is on the pay-roll of the Bole Pump Co. and until he leaves this Company will be governed by instructions from me and not from you.

Now I do not know what your object is in butting in on my business but one thing is certain if it was to injure it you have certainly succeeded. How badly I do not as yet know but as soon as I do know I shall demand that you reimburse me for all losses or damage sustained. [685]

Now, I don't believe that under the circumstances we can continue longer to do business and in breaking any business ties that might exist, there are many things which will have to be settled up and as I do not care to deal further with you I will take these matters, with one exception, up with your Mr. Willard.

This one exception is in regard to the key used in your present-day under-reamer and as I expect we will no longer be friends, if you care to use this key in the manufacture of your under-reamer, from Feb. 1st, 1913, I shall expect a reasonable royalty.

Then there is my stock in your store at Taft and

at Los Angeles and your stock in my store at Coal-
inga. These matters will all have to be taken up
and straightened out. I will be in Los Angeles
Monday and possibly Tuesday and Mr. Willard
knows where to reach me.

There is just one thing more in closing. In re-
gard to the One thousand dollars worth of work you
say I ask you to do for me, I want to say this—I ask
no favors of you or any man. In other words though
I don't weigh any 200 lbs. I can take care of myself
with any man living.

Very truly yours,

ROBERT E. BOLE.

[Endorsed]: In the United States Patent Office.
E. C. Wilson v. Robert E. Bole, In re Interference
No. 37,126. Wilson Exhibit Bole Letter of Janu-
ary 17, 1913. May 28, 1914. I. Benjamin, Notary
Public. B-19—Eq. U. S. Dist. Court, So. Dist.
Cal., So. Div. Bole et al. vs Wilson & Willard Mfg.
Co. et al. Defts.' Exh. (as above). Filed Mar. 23,
1915. Wm. M. Van Dyke, Clerk. Leslie S. Colyer,
Deputy. [686]

**[Defendants' Exhibit 3—Certified Copy of Records
of Patent Office of Declaration of Interference.]**

UNITED STATES OF AMERICA,

Department of the Interior,

United States Patent Office.

To all to whom these presents shall come, Greeting:

THIS IS TO CERTIFY that the annexed is a true
copy from the Records of this Office of the Declara-

tion of Interference, dated January 21, 1914, Preliminary Statement of Elihu C. Wilson, filed March 12, 1914 and Preliminary Statement of Robert E. Bole, filed March 9, 1914, in the matter of Interference.
Number 37,126.

Wilson

vs.

Bole

Subject-Matter:

Underreamer.

IN TESTIMONY WHEREOF I have hereunto set my hand and caused the seal of the Patent Office to be affixed at the City of Washington, this 8th day of December, in the year of our Lord one thousand nine hundred and fourteen and of the Independence of the United States of America the one hundred and thirty-ninth.

[Patent Office Seal]

J. T. NEWTON,

Commissioner of Patents.

10¢ Internal Revenue Stamp canceled. C. S. C.
12/8/14. [687]

2—251.

Letter No.———

Room No. 378

Address only

“The Commissioner of Patents,
Washington, D. C.”

Department of the Interior,

UNITED STATES PATENT OFFICE,
Washington, D. C.

Jan. 21, 1914.

EXAMINER OF INTERFERENCES:

An interference is found to exist between the fol-

lowing cases, and in respect to the invention therein specified, to wit:

CASES.

1. Name—Elihu C. Wilson.

Post-office address—c/o Wilson & Willard
Mfg. Co., 15th St. and Santa Fe Ave., Los
Angeles, Cal.

Title—Under-reamers.

Filed—Mar. 18, 1913, Ser. No. 755,170, Pat'd No.
Attorney—Raymond I. Blakeslee, of California
Bldg., Los Angeles, Cal.

Associate Att'y.— of

Assignee— of

2. Name—Robert E. Bole,

Post-office address—1114 W. 16th St., Los An-
geles, Calif.,

Title—Under-reamer.

Filed—Feb. 19, 1913, Ser. No. 749,343, Pat'd Dec.
2, 1913, No. 1,080,135,

Attorney—Lyon & Hackley, of Merchants'
Trust Bldg., Los Angeles, Calif.

Associate Att'y.— of

Assignee—Edward Double, of Los Angeles,
INTF. NUMBER 37126.

3. Name— _____

INTF. DECLARED FEB. 3, 1914.

Post-office address _____

STATEMENTS DUE MAR. 16, 1914.

Title— _____

Filed—	Ser. No.	Pat'd	No.
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Attorney—		of	
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Associate Att'y.—		of	
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Assignee—		of	
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6-2610

INVENTION.

Count 1. An under-reamer comprising a body having a central bore, a rod or mandrel mounted in said bore, said body provided [688] with a slot, said rod provided with a longitudinal slot, a key or gib mounted in said slot, and provided with a downwardly projecting portion adapted to contact with the wall of the central bore below said slot and prevent lateral displacement of the key from either side of the slot, a spring mounted on said gib and operatively connected with said rod, said rod provided at its lower end with a bit engaging head or key.

Ex'r of Intf—2.

Wilson v. Bole.

Count 2. An under-reamer comprising a body having a central bore, a rod mounted to reciprocate in said bore, said body and rod provided with slots, a key mounted in said slots, said key having a projection or wing projecting downward from the slot of the body into the central bore, and preventing lateral motion of the key, a spring mounted on said key and coiled about said rod, means at the upper end of said rod adjustably connecting said rod and spring, means at the lower end of said rod for engaging and supporting the bits or cutters, and cutters or bits.

Count 3. An under-reamer comprising a body having a central bore, a rod or mandrel mounted in said bore, said body and rod provided with registering slots, a key or gib mounted in said slots, and having a projection or wing fitting within the bore of said mandrel below said slots and shouldering against the wall upon transverse movement in either direction, a spring mounted on said gib and oper-

atively connected with said rod, said rod provided at its lower end with bit engaging and supporting means, said rod being enlarged at its lower end and provided with surfaces adapted to support the inner ends of the bits or cutters, and bits or cutters mounted on said rod.

Count 4. An under-reamer comprising a body, having a central bore, a rod or mandrel mounted in said bore, said body and rod provided with registering slots, a key or gib mounted in said slots, the slot in the rod being of sufficient longitudinal extension to permit the movement of said rod longitudinally of said body, a key or gib loosely mounted in said slots and having a projection or wing projecting downward into the central bore below the walls of the slot in the body, and anchoring said key or gib against movement transversely of said body, a spring mounted on said gib and operatively connected with said rod, said rod provided at its lower end with bit engaging means, bits tilting carried thereby, and bearings for the inner faces of said bits formed on said rod and adapted to prevent lateral displacement of said bits.

Count 5. An under-reamer comprising a body having a central bore, a rod mounted in said bore, said body and rod provided with registering slots, a key or gib loosely mounted in said slots and having means at the bottom for anchoring in said body, a spring surrounding said rod and connected thereto at the top thereof, and operatively connected to said key at its lower end, said rod provided with bit engaging means.

Count 6. An under-reamer comprising a body having a central bore, a spring actuated rod mounted in said bore, said rod provided with bit carrying means, and a key loosely mounted in said body and held therein by the tension of said spring.

Count 7. An under-reamer comprising a hollow body, a spring actuated rod mounted therein and provided with bit carrying [689] means, and a key loosely mounted in said body and operatively connecting said rod and body.

Count 8. An under-reamer comprising a hollow body, a reciprocating rod, a spring and a key operatively mounting said rod in said body, said key fitting loosely in said body and held therein by spring tension on the top, and means preventing the key sliding laterally in the body without overcoming the downward pressure of the spring on the key.

Ex'r. of Intf.—3.

Wilson v. Bole.

The relation of the counts of the interference to the claims of the respective parties is as follows:

Counts.	Wilson.			Bole.		
1	.	.	.	10	.	1
2	.	.	.	9	.	2
3	.	.	.	8	.	3
4	.	.	.	14	.	4
5	.	.	.	7	.	5
6	.	.	.	11	.	6
7	.	.	.	12	.	7
8	.	.	.	13	.	8

G. R. IDE,
Examiner, Division 38.

Counts Compared.

MKP

C. M. S.

E. E. G. [690]

37126—5

STATEMENT OF WILSON.

FILED March 12, 1914.

APPROVED March 20, 1914.

D.

IN THE UNITED STATES PATENT OFFICE.

INTERFERENCE NO. 37,126.

ELIHU C. WILSON

vs.

ROBERT E. BOLE.

INTERFERENCE NO. 37,126.

SUBJECT MATTER: UNDER-REAMERS.

PRELIMINARY STATEMENT OF ELIHU C.
WILSON.

State of California,

County of Los Angeles,—ss.

Elihu C. Wilson, of Los Angeles, County of Los Angeles, and State of California, being duly sworn, deposes and says: That he is a party to the Interference declared by the Commissioner of Patents February 3, 1914, between his application for Letters Patent for Under-reamers, filed March 18, 1913, Serial Number 755,170, and a patent for Under-reamers issued to Robert E. Bole, of Los Angeles, California, December 2, 1913, Number 1,080,135, issued upon an application filed February 19, 1913, Serial Number 749,343; that deponent conceived the invention set forth in the Declaration of Interfer-

ence on or about January 26, 1911; that he first made drawings of the invention on or about February 1, 1911, and April 22, 1911; that he first explained the invention to others on or about February 3, 1911; that he first embodied the invention in a full size device work upon which was commenced on February 3, 1911, and which was completed on or about March 8, 1911, and that the said device was first successfully operated at or near Edgemont, South [691] Dakota, on or about June 29, 1911, and that prior to said last mentioned date he embodied said invention in another full size device work upon which was commenced on or about the 11th day of March, 1911, and which was completed on or about the 27th day of April, 1911, and which was first successfully operated on or about the 29th day of May, 1911, at or near Kerto, California; that he has made or caused to be made at least three hundred and sixty-one (361) embodiments of said invention or under-reamers containing said invention, most of which have been sold by or for him at Los Angeles, California, and other points; and that no foreign patent application for the said invention has been filed by him or his representatives or assigns prior to the filing date of his above identified patent application, Serial Number 755,170.

ELIHU C. WILSON.

Subscribed and sworn to before me this 6th day of March, 1914, at Los Angeles, County of Los Angeles, and State of California.

[Seal]

W. F. COOK,

Notary Public in and for Said Los Angeles County,
State of California.

C. M. S.

E. E. G. [692]

37126—3

STATEMENT OF Bole.

FILED March 9, 1914.

APPROVED March 20, 1914.

D.

IN THE UNITED STATES PATENT OFFICE.

WILSON

vs.

BOLE.

INTERFERENCE NO. 37,126,

SUBJECT MATTER: UNDER-REAMER.

PRELIMINARY STATEMENT OF ROBERT E.
BOLE.

Robert E. Bole, of Los Angeles, in the County of Los Angeles, and State of California, being duly sworn, deposes and says:

That he is a party to the Interference declared by the Commissioner of Patents February 3rd, 1914, between said Bole's Letters Patent No. 1,080,135, patented December 2nd, 1913, (application filed February 19th, 1913, Serial No. 749,343), and an application for Under-reamers, filed by Elihu C. Wilson, of Los Angeles, in the County of Los Angeles, and State

of California; that affiant conceived the invention set forth in the Declaration of Interference between September 12th and September 20th, 1908; that between September 12th and September 20th, 1908, affiant first made a drawing of the invention and explained the same to others; that said drawing was sent, with an order for an under-reamer to be built in accordance therewith, to Wilson & Willard Manufacturing Company, of Los Angeles, California, which letter and order are believed to be among the records of said Wilson & Willard Manufacturing Company, of which Company said Elihu C. Wilson has at all times been president and has been owner of approximately one half of the issued capital stock [693] thereof; that said invention was reduced to practice by said Wilson & Willard Manufacturing Company and that without access to the records of said Company, which are in the control of said Elihu C. Wilson, affiant is unable to state definitely the date of commencement of making the first of such under-reamers or the date of its first completion or first trial or use; that many other under-reamers embodying said invention have been manufactured and sold, but the extent of such manufacture and sale is among the records of said Wilson & Willard Manufacturing Company which are not accessible to affiant, being in the control of said Elihu C. Wilson.

ROBERT E. BOLE.

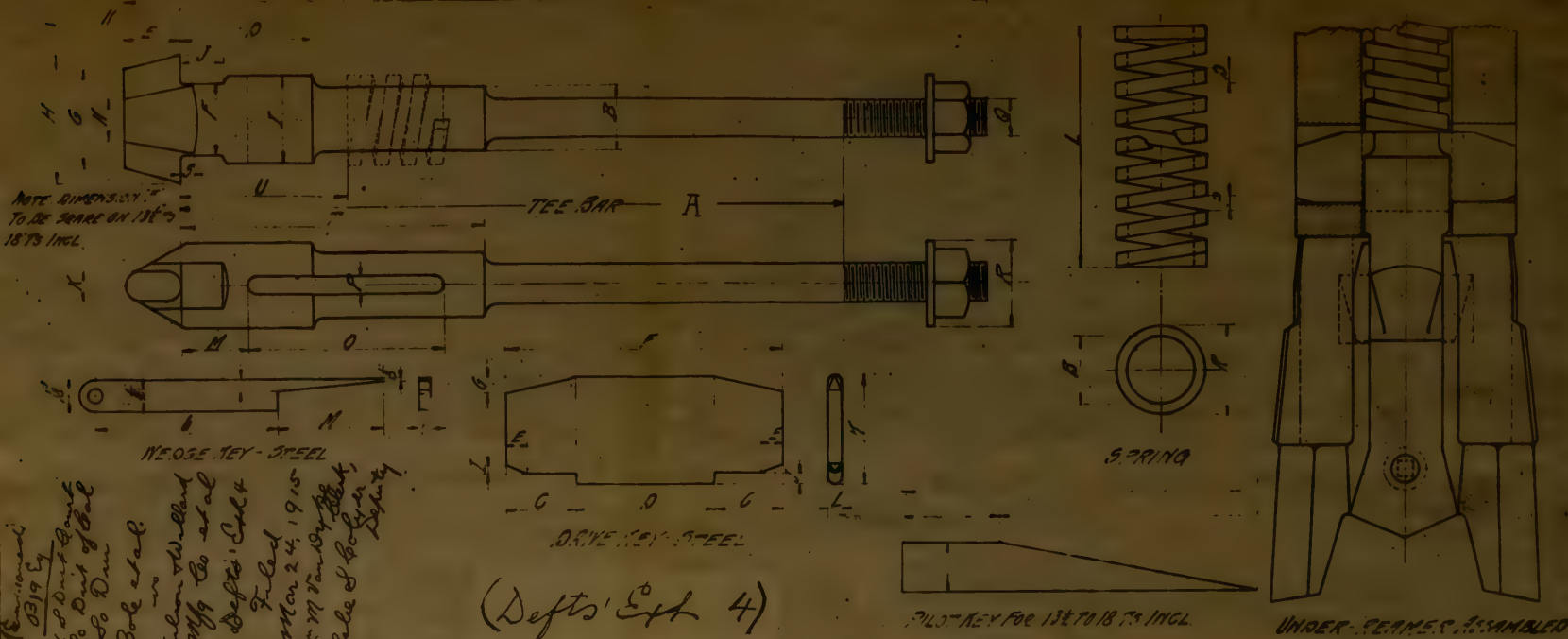
Subscribed and sworn to before me this 2d day of March, 1914.

[Seal] LORRAINE E. DURROW,
Notary Public in and for Los Angeles County, State
of California.

C. M. S.

E. E. G.

[Endorsed]: B-19—Eq. U. S. Dist. Court, So.
Dist. of Cal., So. Div. Robert E. Bole et al., vs. Wil-
son & Willard Mfg. Co et al. Defts, Exh. 3. Filed
Mar. 24, 1915. Wm. M. Van Dyke, Clerk. Leslie
S. Colyer, Deputy. [694]



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WILSON & WILLARD MFG. CO

5/10/191.

From Treadle Hill, Conn.

1760.

540 10

Kerto - Kat -

State of

5/24/11

Shipped 5/25-11
Driver Amey
Route Sp Fr

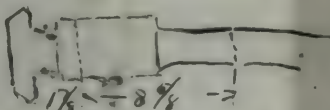
E. F. Grigsby.

- 1 10" Reamer Body #496, 3x4x7 Pin.
to take the place of Reamer #326.
2 10" Slotted Tee (new style)
2 Small lever for removing Key.

1 1/4" Slot to bearing

(Not) When the above is shipped, notify Mr. Turner of Akron.

Me (K)



June 12, 1914

*Hypocissus
notata*

Order in kind 1/2 lb. each of ham and
cured beef 4.

U.S. Postoffice
 Astoria, La. Interferencia
 File } no 37126

W. D. Paul & Son
do. Dist. Cal.
do. San

W. D. Paul & Son
do. Dist. Cal.
do. San

FIELD

Depth 500.
(as above)

MAR 24 1915

Wm. H. van Dyke, Clerk
Edw. J. G. Johnson

N. O. Patent Office

Patent } La. State Machine

File } No 37126

Free Exhibit Wilson Cross-hatching Exhibit 3

June 12, 1916

Mr. J. H. Thompson

U. S. Patent Office
Washington, D. C.

Wilson Willard
Mfg. Co. et al.

Doyle, E. L.
(do above)

Wm. M. Thompson, Clerk
Patent Office

SHOP ORDER

WILSON & WILLARD MFG. CO.

Letter 6, 8, 11

Date

Herbeck & Nicholson Co.,

Charge to

Edgemont, S. D.

Ship to

Freight.

Ship via

- 1 8" Wilson Under-runner 170.
with 20 x 30 - 7 flat I & II thread
ONS pattern - 4" square.
ex. sets of 8" cutters.
- 2

Note: The above runner to be
new style with heavy slotted too.

See sketch of tee. special slot & etc.

E. F. Crosby.

Shipped	6/17-11
Driver	Stacy
Route	Sp 70

By Special
at night angle
Drawing

MILLING

Date 3-14-1911

Name *Hubb. Ester*
Order No. *120*

6904

No. Hours *1 1/2* O. L. *K*

KL/SEATER

Date *3/20*

Name *E. J. Harshey*
Order No. *6904*

8" Reamer #120

No. Hours *1 1/2* O. L. *K*

FITTING

Date *3-6-11*

Name *Acuthornist*
Order No. *120*

8" Reamer

No. Hours *7* O. L. *K*

DRILLING

Date *2-22-*

Name *Acuthornist*
Order No. *120*
8" Reamer

No. Hours *3 1/4* O. L. *K*

DRILLING

Date *2-21-*

Name *Acuthornist*
Order No. *120*
8" Reamer
6904

No. Hours *1 1/2* O. L. *K*

Handwritten notes and a table with columns for 'ADD' and 'SUB'.

ADD	ADD	ADD	ADD	ADD	ADD

APPRENTICE

Order No. 120 Date 2-20-11
 Name E. B. Brien
 Article 6904
 No. Pieces
 Operation Key setting reamer.

ON	OFF	ON	OFF	ON	OFF
Learning to run mach.					

No. Hours 3 $\frac{3}{4}$ O. K. 15 Foreman

HELPER

Order No. 120 Date 7/8
 Name greasy
 Article Moving Reamer
 No. Pieces
 Operation # 1208

ON	OFF	ON	OFF	ON	OFF
6904					

No. Hours $\frac{1}{4}$ O. K. 15 Foreman

FORGE

Order No. 6904 Date Febr. 9 1911
 Name F. Rydgren
 Article Installing under
 No. Pieces reamer #120
 Operation

ON	OFF	ON	OFF	ON	OFF
E100 E110					

No. Hours 1 O. K. 15 Foreman

FITTING

Order No. 120 Date 2-27-11
 Name Aut. Tourist
 Article 8 Reamer
 No. Pieces
 Operation

ON	OFF	ON	OFF	ON	OFF
E 659	E 8 ⁰⁰ ₇	E 3 ⁰⁰ ₂	E 3 ⁰⁰ ₅		
120 6904					

No. Hours 3 O. K. 15 Foreman

FITTING

Order No. 120 Date 2-22-11

Name Arthur L. Smith

Article 8th Harriet

No. Pieces

Operation 6904

ON	OFF	ON	OFF	ON	OFF
W 851	W 924				

No. Hours 4 O. K. 1

FITTING

Order No. 120 Date 2-21-11

Name Arthur L. L.

Article 7th Amendment

No. Pieces

Operation 6907

ON	OFF	ON	OFF	ON	OFF
		21202	72 113		

No. Hours 7 O.K. 11

HELP

Order No. 6204 Date 2/20/

Name Chas. Davis

Article *Coil Spring* 67

No. Floor

Operation

This spring also seen

SA		OFF	ON
648	219	430	

No. Hours 9 O. K. K

FITTING

Order No. 120 Date 2-24-11

Name Anderson

Art. 8. Revised

No. Pieces

Operation 6944

ON	OFF	ON	OFF	ON	OFF
FR 652	FR 828	FR 1116	FR 1202		

No. Hours 2 1/2 O. K. A

FITTING

Order No. 120 Date 2-28-11
 Name Subbounist
 Article 8 Reamer
 No. Pieces _____
 Operation 6904

ON	OFF	ON	OFF	ON	OFF
1 55			4 47		

No. Hours 2 1/2 O. K. 15 Foreman _____

FITTING

Order No. 120 Date 3-4-11
 Name Subbounist
 Article 8 Reamer
 No. Pieces _____
 Operation 6904

ON	OFF	ON	OFF	ON	OFF

No. Hours 1 O. K. 15 Foreman _____

HELPER

Order No. 6904 Date 2/9/11
 Name Chas. F. Hagen
 Article turning under
 No. Pieces reamer 170
 Operation _____

ON	OFF	ON	OFF	ON	OFF

No. Hours 1 O. K. 11 Foreman _____

FORGE

Order No. 6904 Date Febr 25 1911
 Name F. Hagen
 Article Coil Spring & key
 No. Pieces _____
 Operation This spring also
mounted & inspected

ON	OFF	ON	OFF	ON	OFF

No. Hours 5 3/4 O. K. 15 Foreman _____

LATHE

Order No. _____ Date 7/15/11
 Name Wade
 Article 8" Floor Reamer #120
 No. Pieces 6904
 Operation _____

ON	OFF	ON	OFF	ON	OFF
655	1218	11			

No. Hours 7 1/2 O. K. 11 Foreman _____

20

PLANER

Order No. _____ Date Feb 21/11
 Name J.H. Bloomer
 Article 8" Reamer
 No. Pieces _____
 Operation 6904

ON	OFF	ON	OFF	ON	OFF

No. Hours 1 1/2 O. K. 15 Foreman _____

R

PLANER

Shops

Order No. _____ Date 2-23-11
 Name J. Ures
 Article Reamer #120
 No. Pieces 6904
 Operation _____

ON	OFF	ON	OFF	ON	OFF

No. Hours 1 O. K. 15 Foreman _____

FITTING

Order No. 6904 Date 2-7-11
 Name W. Woody
 Article Reamer
 No. Pieces _____
 Operation Fitting

ON	OFF	ON	OFF	ON	OFF

No. Hours 1 1/2 O. K. 15 Foreman _____

FORGE

Order No. _____ Date: April 14 1911

Name (7) Hydrogen

Article Kardish under

No. Places river # 120

Operation 6904

[illegible]

No. Hours 1 O. K. 15 Foreman

HELPER

Order No. Date 7/15/11

Name Charles L. Lingo

Article *Garden under*

No. Pieces *runner #120*

Operation 6904

ON	OFF	ON	OFF	ON	OFF

No. Hours 1 O. K. 15 Foreman

24

FORGE

Order No. 8704 Date Feb 22, 1977


Name J. Nydgren

Article 1078

No. Pieces . . .

Operation

[illegible]

No. Hours $\frac{1}{4}$ O.K.  Foreman

Foreword

6904 **PLANER** *Chaper*

Order No. *2-25-11* Date
Name *J. Wells*
Article *Penner 120*
No. Pieces
Operation *Key + etc*

ON	OFF	ON	OFF	ON	OFF
CO. 121 ELE NOV 16 1911 U. S. T. M. L. 257					

1 1/2

811
FORGE

Order No. *6904* Date *Feb 23 1911*
Name *J. Wells*
Article *Key*
No. Pieces
Operation

ON	OFF	ON	OFF	ON	OFF
TH 8 09	TH 8 33				

No. Hours *1 1/2* O. K. *15*

FORGE

Order No. *6904* Date *Feb 22 1911*
Name *J. Wells*
Article *Key*
No. Pieces
Operation

ON	OFF	ON	OFF	ON	OFF
W 3 53	W 4 14				

No. Hours O. K. *15*
Foreman

HILL

Order No. *6904* Date *Feb 22 1911*
Name *J. Wells*
Article *Key*
No. Pieces
Operation

ON	OFF	ON	OFF	ON	OFF
F 8 09	TH 8 33				

No. Hours *1 1/2* O. K. *15*
Foreman

HELPER

Order No.

Date

Name

Article

No. Pieces

Operation

ON	OFF	ON	OFF	ON	OFF
W 358	W 410				

No. Hours

O. K.

Form up

SHOP ORDER.

WILSON & YELLARD ENG. CO.

Date

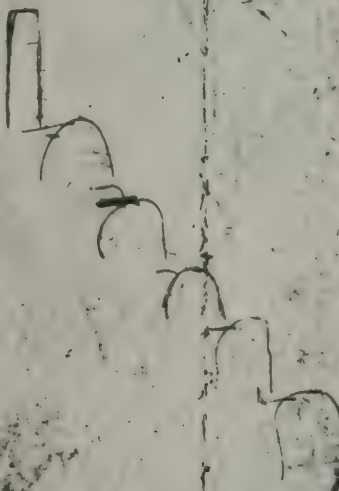
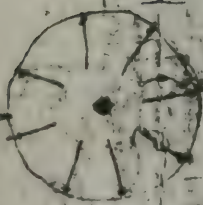
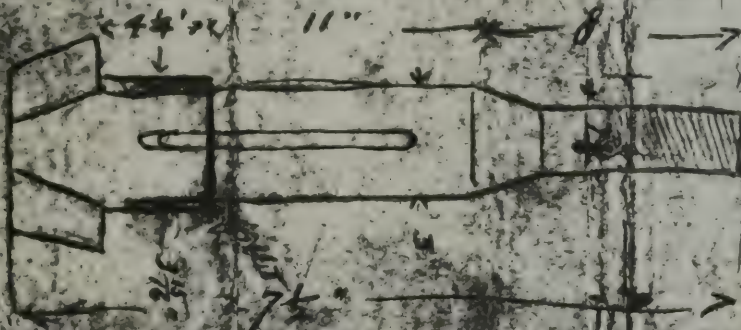
Charge to

Ship to

Ship via

7056

7056



ORDER RECEIVED FROM WILSON & WILLARD MFG. CO.

SHOP ORDER,

ORDER NO. 1056

Date 3/27/11

Charge to

CO. WY. 2/3

Ship to

Ship via

SALESMAN

Port & Machine 1 special 8" slotted
McC 3 nickel stool.
Coil 1 special spring for same.

O.K.	3/27/11
Date	
Foreman	H

SHOP ORDER,

WILSON & WILLARD MFG. CO.

Date

Charge to

Ship to

Ship via

6904

3

Change of form. 120.
Anneal same & remill to size
size 8" button.
Bore out a hole for spring 4"
diameter.
Use special 7/16 X 7/8 X 8" pin.
Put in bottom bolt.
Equip with extra heavy slotted
of new type, same to be made of
nickel steel.

4/22/11
K

MATERIAL

Date Feb 23 1911

Order No. 6904 Job Key

2 5/8" x 2 1/2" Nickel steel 3 lbs

F. Rydgreen
Bearer

O. K. 11

Foreman

In the United States District Office
 C.C. Wilson { where interference
 No. 37,126
 Robert E. Bole

Mission Exhibit February
 1911 Shop Record & Sells Wilson
 and Willard Manufacturing
 Company Shop Record Sells
 May 28, 1914

Prigam
 Notary Public
 0319 Eq.
 U.S. Dist. Court
 So. Dist. of Cal
 So. Dist.
 Bole et al.
 Wilson et al. vs. Bole
 et al.

Orderd: 0319 Eq. U. S. Dist. Court, So. Dist. Cal. So.
 v. Bole et al. vs. Wilson & Willard Mfg. Co. et al. Defts
 7 Filed Mar 24 1915 W. V. VAN DYKE, Clerk, Leslie
 Colyer, Deputy.

Indefinite

No. 37122

1882

Product of Nelson Cross -
 1st. 2nd. 3rd. 4th. 5th. 6th. 7th. 8th. 9th. 10th. 11th. 12th.

Exhibit No. 2

Dec. 12, 1914

[illegible]

62

1877

de Good Thal.

ad-

Accepted

to the island of

THE END

Mar 21 1915

Wm. H. Van Dyke, Clerk

[illegible]

7056

7056

JTEH-22

Order No. 7056 Job Coil spring
13 ft. of 5" 0 Spring steel
F. Rydgren O.K. ✓ Foreman

Order No. 7056 Job Coil spring
13 ft. 5" 0 Spring steel
F. Rydgren O.K. ✓ Foreman

MATERIAL Date 2-20-11
Order No. 7056 Job 1 - special 8" Tee
95 lbs of 414 Machine steel

Remeris - 118 O.K. ✓ Foreman

MATERIAL Date 2-21-11
Order No. 7056 Job

1 - 13/8" Tee over -
For special TCB or
Applicant O.K. ✓ Foreman

LATHÉ

Order No. 7056 Job 2-27-11
Name Fred G. S.
Article Special Bar

No. Pieces
Operation

ON	OFF	ON	OFF	ON	OFF
7:00	7:15	11:00	11:15	Σ 1214	
1					

No. Hours 13.15

LATHE

Order No.

Date

Name

Article

No. Pieces

Operation

ON	OFF	ON	OFF	ON	OFF

No. Hours

O. K.

Foreman

LATHE

Order No.

Date

Name

Article

No. Pieces

Operation

ON	OFF	ON	OFF	ON	OFF

No. Hours

O. K.

Foreman

LATHE

Order No.

Date

Name

Article

No. Pieces

Operation

ON	OFF	ON	OFF	ON	OFF

No. Hours

O. K.

Foreman

FITTING

Order No.

Date

Name

Article

No. Pieces

Operation

ON	OFF	ON	OFF	ON	OFF

No. Hours

O. K.

Foreman

PLASTER *Chapman*

Order No. *7056* Date *2-22-11*
 Name *J. Wells*
 Article *Special 8"*
 No. Pieces *7 or less*
 Operation _____

ON	OFF	ON	OFF	ON	OFF

No. Hours *3 1/4* O. K. *15* Foreman _____

HELPER

Order No. *7056* Date *2/22/11*
 Name *Chas Berg*
 Article *Coil spring*
 No. Pieces _____
 Operation _____

ON	OFF	ON	OFF	ON	OFF

No. Hours _____ O. K. _____

8" Tor Bar

O. K. *15*

Foreman _____

HELPER

Order No. *7056* Date *2/21/11*
 Name *Chas Berg*
 Article *Coil spring*
 No. Pieces _____
 Operation _____

ON	OFF	ON	OFF	ON	OFF

No. Hours *4 1/4* O. K. *15*

Date *2-23-11*

Rate _____

HELPER

Order No. 7053 Date 3/3/11
 Name Chas. Romero
 Article 8" special Tee Bar
 No. Pieces _____
 Operation _____

ON	OFF	ON	OFF	ON	OFF
652	11				

No. Hours 4 1/2 O. K. X Foreman _____

FORGE

Order No. 7056 Date 2-18-11
 Name Chas. Romero
 Article 8" special Tee Bar
 No. Pieces _____
 Operation _____

ON	OFF	ON	OFF	ON	OFF
			231		

No. Hours _____ O. K. _____ Foreman _____

15

HELPER

Order No. 7056 Date 2-18-11
 Name John Cully
 Article 8" special Tee Bar
 No. Pieces _____
 Operation _____

ON	OFF	ON	OFF	ON	OFF
1031	1230	1230	231		

No. Hours 3 1/2 O. K. X Foreman _____

HELPER

Order No. 7056 Date 2-18-11
 Name Geo Bracken
 Article 8" special Tee Bar
 No. Pieces _____
 Operation _____

ON	OFF	ON	OFF	ON	OFF
1230	1230	231			

No. Hours 3 1/2 O. K. X Foreman _____

17

FORGE

Order No. 7056 Date 2-18-11
Name F. Condon
Article 8" special Test Bar
No. Pieces
Operation

ON	OFF	ON	OFF	ON	OFF
21051	21230	21230	231		

No. Hours 3 1/2 O. K. 11 Foreman

FORGE

Order No. 7056 Date Feb 18 1911
Name F. Rydgren
Article Coil spring
No. Pieces
Operation

ON	OFF	ON	OFF	ON	OFF
2750	11				

No. Hours 4 1/2 O. K. 15 Foreman

FORGE

Order No. 7056 Date Feb 21 1911
Name F. Rydgren
Article Coil spring
No. Pieces
Operation

ON	OFF	ON	OFF	ON	OFF
21053	21118	21225	11	21225	2449

No. Hours 4 1/4 O. K. 15 Foreman

FORGE

Order No. 7056 Date Feb 22 1911
Name F. Rydgren
Article Coil spring
No. Pieces
Operation

ON	OFF	ON	OFF	ON	OFF
2750	11				

No. Hours 3 1/4 O. K. 15 Foreman

U. S. Patent Office

E. C. Wilcox

der Indifferenz

Ms. 97/26

Robert E. Toles

Wilson Exhibit Draft Single Piece Key
Reproduction Sketch.

June 23, 1914.

June 23, 1914.

B1929.

U. S. Dist. Court
S. Dist. Cal.

Bo. Div.
Bo. at

Bolet al.

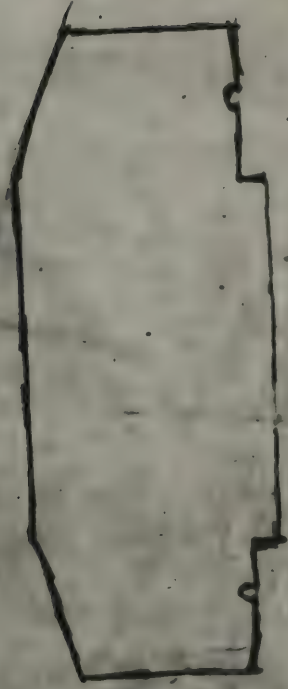
Wilson & Willard
Mfg. Co. et al.

Dep'to Exh. (a above)

CHILL

MAR 24 1915

Wm. M. F. du Puy, Clerk
Leah S. Carter, Deputy



DOCKET CLERK
NOV 16 1914
U. S. PATENT OFFICE

STO. 8 Tee

Special tie for 8" Rebar # 120

→ $\frac{7}{16}$ 14 SPRING 16 COILS $\frac{11}{16}$ I.D. $3\frac{13}{16}$ O.D.
MADE FROM $\frac{5}{8}$ " O $13\frac{1}{2}$

4/22/11

$7/16$ - 1. thick

2/5

7 1/6

3.15/16

In the United States Patent Office

Wilson } In re Wilson
No. 37122

Robert E. Hale

Wilson Exhibit Wilson Reamer
Key and Tee sketch of 1911

May 29, 1914

Dr. J. M. Wilson
Notary Public

Wilson & Willard Mfg. Co.
et al.

Repl's Exh. (in 64)

FILED

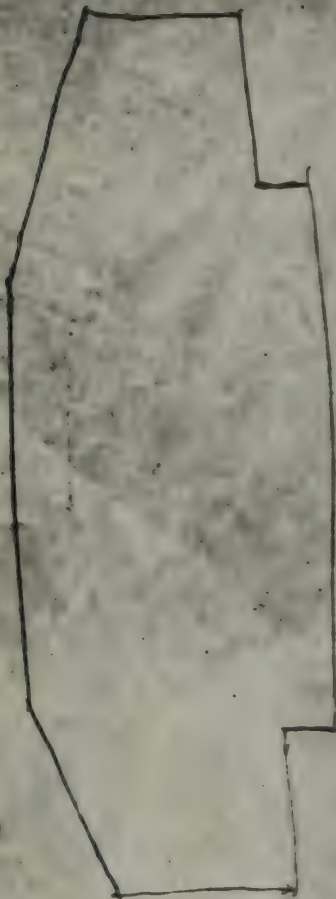
MAR 24 1915

Wm. M. Van Dyke, Clerk
Leah H. Hays

Memorandum

Letter from Pat. Ream work filed 4/28/11
in reply to our letter of 4/26/11 was the communication
of plans to change to Skel Tee & Key type
Exh.

Key made on 6904-R/859-www



B19 Ey
U. S. Dist. Court,
So. Dist. Cal.
So. Div.

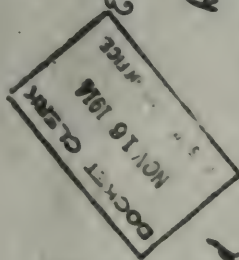
Hole, et al.

Wilson & Willard
W. J. Co. et al.

FILED

MAR 22 1914

Wm. H. Van I.
Edw. C. Goyer



U. S. Patent Office
E. C. Wilson } In Interference
" } No. 37126

Robert E. Hale
Wilson's Exhibit Chas. E. Wilson Key
Reproduction Hatched.

June 11, 1914
St. Petersburg
Patent Office

U. S. Patent Office
E. C. Wilson } In Interference
 } No. 7714
Robert E. Bole

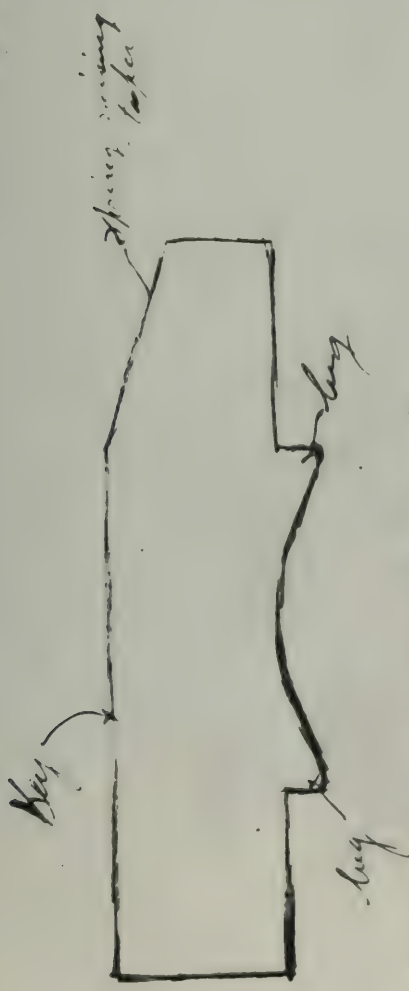
Wilson Exhibit W.W. Wilson Key
Reproduction Sketch
June 17, 1914 J. H. Ferguson
 Arthur J. Pabian

DOCKET CLERK
NOV 16 1914
U. S. PATENT O.

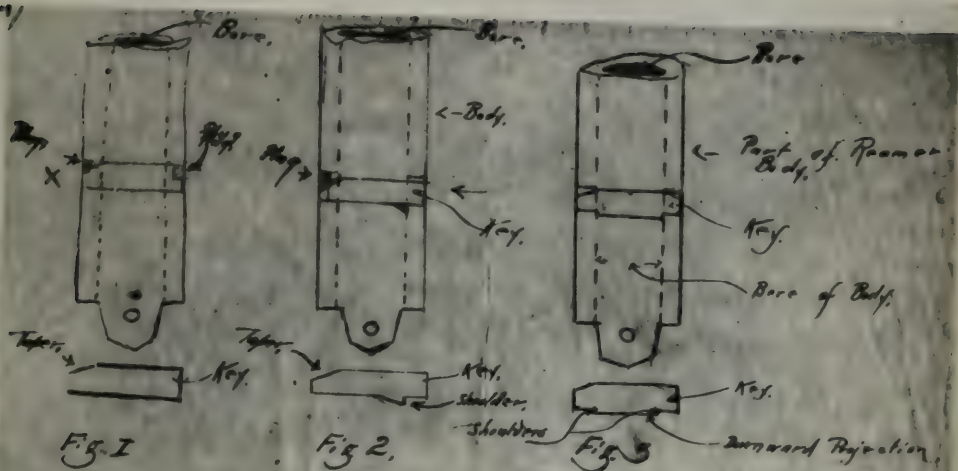
B19 E
U. S. Dist. Court
S. Dist. Cal.
Bole et al.
vs
Wilson, Willard & Co. et al.
Def'ts' Exh (as above)
FILED

MAR 25 1915

Wm. M. Van Dyke, Clerk
Lochiel Colyer, Deputy



Sketch of key as described in the
specification.



In the United States Patent Office

C. C. Wilson

Robert E. Poole

In re interference
No. 37,126

Wilson Exhibit Wilson Reproduction
Sketch of sketches of date January
and early February, 1911

May 28, 1914

J. Bruggman
Library Public

B. 1924
U. S. Dist. Court
So. Dist. Cal.
So. Dist.
So. Dist.
W. L. G. & Co. Chas.
May 28, 1914
Dep't. Exp.
FILED

MAR 25 1915

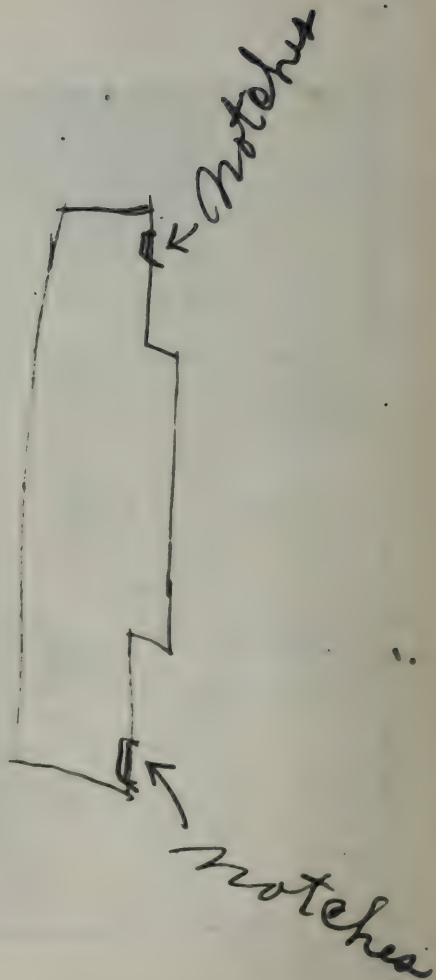
Wm. M. Van Dyke, Clerk
Leah J. Seligman, Deputy

B19 Eq
 U. S. Dist. Court
 So. Dist. Cal.
So. Div.
Bole et al.
 vs
Wilson & Willard
Mfg. Co. et al.
 Defts' Exh. 10.

FILED

MAR 25 1915

Wm. M. Van Dyke, Clerk
Leslie S. Colyer Deputy



1919 Ex.
 U. S. Dist Court
 So. Dist Cal.
 So. Dist
 Cole et al.
 vs.
 Wilson & Willard
 Mfg. Co et al.
 Defto' Exh. 13

FILED

MAR 27 1915

Wm. M. Van Dyke, Clerk

Leslie S. Colby, Deputy

← D 1

1 1

1 1

U. S. Patent Office

E. C. Wilson } Interference
 } No 97126
Robert R. Boyle }

Boyle Exhibit Wilson
Cross Examination
Exhibit 6

June 15, 1914

W. J. Van Dyke
U. S. Patent Office

W. J. Van Dyke, Clerk
Paul J. Coffey, Attorney

MAR 27 1915

FILED

Boyle vs. Wilson
Exhibit 6
No. 97126
Boyle vs. Wilson
Exhibit 6
No. 97126

97126
Wilson vs. Boyle
No. 97126
Boyle vs. Wilson
Exhibit 6
No. 97126

709

709

709

Drilling and Fitting

Name *W. B. Reynolds*
 Order No. 709 Job 13
95% Reamer

Date *Sept 17 1908*
 Rate

No. Hours 4

O. K.

Foreman

Machinist

Name *Be*
 Order No. 709 Job 173
95% Reamer

Date *Sept 13 1908*
 Rate

No. Hours 4

O. K.

Foreman

Machinist

Name *Be*
 Order No. 709 Job 173
95% Reamer

Date *Sept 22nd 08*
 Rate

No. Hours 2

O. K.

Foreman

Machinist

Name *J. B. Dapelt*
 Order No. 109 Job
Milling 95% Reamer #173

Date *9/19, 1908*
 Rate

No. Hours 2 1/2

O. K.

Foreman

Machinist

Name *J. B. Dapelt*
 Order No. 709 Job
95% Reamer #173

Date *9/21*
 Rate

No. Hours 9

O. K.

Apprentice

Name *J. B. Reynolds*
 Order No. 709 Job
Drilling and

Date *9-23-08*
 Rate

No. Hours 7 1/2

Wachstums

Machineist G. N. alish

Machineist J. Walsh
 No. 769 in 9th Wilson Beaver # 22
 on Sept. 24 1905

Barthelme

No. 100711/2

五

Forming

Laboreers

Date June 11

Date 9-24

Date _____

Order No. 709 Job

Handing Pass
1.0 m # 173
1.0 / 1.0

No. Hours

O. K.

Foreman

Machinist

Machinist L. G. Triplett

Date _____

Date _____

Order No. 709 Job

Willing 95% Leamer # 173

No. _____

foreman

9-24-08

1844
A. L. Eckhardt

Reamer #173

Price 1.

5/2 4 items.

Ferruzzi

18-11-18

11

95 Rembr # 173

9

Q. K.

Form 20

Lathi

Wachstums

Date Sept 19-08

Date _____

Order No. 709 Job

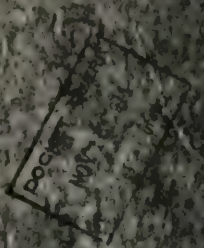
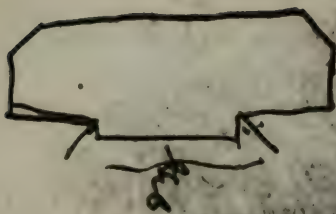
705

93 rem. # 173

2

Perceptual





B19 E
 U. S. Dist. Court
 So. Dist. Cal.
 So. Div.
 Robert at al.
 vs.
 Wilson & Willard
 Mfg. Co. et al.
 Deft's Exh. 15

FILED

MAR 27 1915

Wm. M. Van Dyke, Clerk
 Charles L. Colby, Deputy

H. J. Peters Office
 Large Edwin Coleman
 Robert C. Pole

Pole's Exhibit Adams Hotel

Sept 30, 1914

J. P. Ryan

[Defendants' Exhibit 16—Certified Copy File-wrapper Contents and Drawings, Application of E. C. Wilson, Serial No. 755,170.]

2-390.

UNITED STATES OF AMERICA,

Department of the Interior,

United States Patent Office.

To all to whom these presents shall come, Greeting:

THIS IS TO CERTIFY that the annexed is a true copy from the Records of this Office of the File Wrapper, Contents and Drawing in the matter of the

Pending Application of
Elihu C. Wilson,

B-19-Eq.
U. S. Dist. Court, So. Dist.
of Cal. So. Div.
Robt. E. Bole et al.

vs.

Filed March 18, 1913, Serial Number
755,170, for

Improvement in Underreamers.

Wilson & Willard Mfg. Co.
et al. Deft's Exh. 16.
Filed Apr. 12, 1915. Wm.
M. Van Dyke, Clerk. By
Leslie S. Colyer, Deputy.

IN TESTIMONY WHEREOF I have hereunto set my hand and caused the seal of the Patent Office to be affixed at the City of Washington, this 12th day of June, in the year of our Lord one thousand nine hundred and fourteen and of the Independence of the United States of America, the one hundred and thirty-eighth.

[Patent Office Seal] R. F. WHITEHEAD,
Acting Commissioner of Patents.

6-1625 [730]

DIV. 38 2-437

NUMBER (SERIES OF 1900).

1913.

755,170

(EX'R'S BOOK). 265/8-C

PATENT NO.

Name—Elihu C. Wilson,

of Los Angeles,

County of

State of California,

Invention Underreamers.

ORIGINAL.

RENEWED.

Petition	Mar. 18	, 1913	, 191
Affidavit	“ “	, 1913	, 191
Specification	“ “	, 1913	, 191
Drawing	“ “	, 1913	, 191
Photo Copy	Jan. 17/14	, 191	, 191
First Fee Cash \$15, Mar. 18		, 1913	, 191
“ “ Cert.		, 191	, 191
Appl. filed complete Mch. 18		, 1913	, 191
Examined and Passed for Issue		, 191	, 191
Exr. Div.			Exr. Div.
Notice of Allowance		, 191	, 191
By Commissioner.			
Final Fee Cash		, 191	, 191
“ “ Cert.		, 191	, 191
Patented			, 191

Associate Attorney

Attorney—

RAYMOND IVES BLAKESLEE,

California Bl'd'g.

Los Angeles, Cal.

(No. of Claims Allowed) Title as Allowed.

(Cl.) [731]

\$15 RECEIVED

D Mar. 18, 1913

CHIEF CLERK U. S. PATENT OFFICE.

PETITION AND POWER OF ATTORNEY

To the Commissioner of Patents:

Your petitioner, Elihu C. Wilson, a citizen of the United States, and resident of Los Angeles, County of Los Angeles, State of California, whose Post Office address is care of Wilson & Willard Manufacturing Company, Fifteenth Street and Santa Fe Avenue, Los Angeles, California, prays that Letters Patent may be granted to him for the improvements in UNDER-REAMERS, as set forth in the annexed specification; and he hereby appoints Raymond Ives Blakeslee, Registry No. 2794, of 728-29-30 California Building, Second Street and S. Broadway, Los Angeles, Los Angeles County, California, his Attorney, with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to sign the drawings, to receive the patent, and to transact all business in the Patent Office connected therewith.

Signed at Los Angeles, in the County of Los Angeles, State of California, this 26th day of February, 1913.

ELIHU C. WILSON.

SPECIFICATION.

TO ALL WHOM IT MAY CONCERN:

Be it known, that I, Elihu C. Wilson, a citizen of the United States, residing at Los Angeles, in the County of Los Angeles, and State of California, have

invented new and useful improvements in UNDER-REAMERS, of which the following is a specification: [732]

This invention relates to underreamers, such as are employed in enlarging oil well and other well holes to permit the lowering of the casing in the hole following the drilling operation; and the invention constitutes an improvement upon or departure from the invention disclosed in and patented by Letters Patent of the United States issued to me July 31, 1906, for Underreamers, Number 827,595. The present invention relates particularly to the means for holding one end of the spring which is employed in expending the cutters or bits of the reamer into working position. It has been found in practice that the means disclosed in said Letters Patent Number 827,595, while operative and performing the functions required of them, are, under certain conditions, open to certain objections which are overcome by the use and substitution therefor of the means set forth and embodying the present invention.

The present invention has for particular objects the provision of an improved underreamer, and particularly of improved means of the general nature specified as a feature of underreamers, which will be superior in point of simplicity and inexpensiveness of construction, facility in assembling and disconnection of parts and features, durability or length of life, freedom from liability to get out of order in long continued service, and positiveness in operation, and which will be generally superior in efficiency and serviceability.

With the above and other objects in view the invention consists in the novel and useful provision, formation, construction, combination, association and relative arrangement of parts, members and features, all as hereinafter described, shown in the drawing and finally pointed out in claims.

In the drawing: [733]

Figure 1 is a fragmentary vertical sectional view of a portion of a joint of casing such as is employed in well holes with the shoe thereof, and further of the principal features of construction of an improved under-reamer constructed and organized in accordance with the invention, the cutters or bits being in contracted positions;

Figure 2 is a similar view showing the cutters in expanded positions;

Figure 3 is a fragmentary view of the under-reamer with the cutters or bits removed, the view being taken in a line of vision at right angles to that of Figures 1 and 2; and

Figure 4 is a detail transverse sectional view taken upon the line x^4 ——— x^4 , Figure 1, and looking in the direction of the appended arrows.

Corresponding parts in all the Figures are designated by the same reference characters. [734]

Referring with particularity to the drawing, 5 designates the hollow body and A and B the cutters or bits of an underreamer constructed to embody the invention in one form. The underreamer is shown as within the casing 6, and the shoe 7 in Figure 1, and as projected at its lower end beneath the shoe in Figure 2, the cutters being held collapsed in Figure

1, by the shoe and casing, and being in expanded positions in Figure 2, such expansion being *caused* by a coil spring 8 within the hollow body 5 and surrounding a rod or mandrel 9, which plays vertically in the hollow body, the spring being confined between a nut or removable stop 10 at the upper end of the spring actuated rod or mandrel 9, and a key 11 detachably accommodated within a transverse slot 12 in the rod 9 adjacent to the lower end thereof. The slot 12 is elongated longitudinally of the rod, so that the key may remain in relatively fixed position during the longitudinal movement of the rod. A transverse slot 13 in the hollow body 5 permits the insertion and withdrawal of the key. The key 11 is provided with tapered end portions 11^a, and with a bottom extension or head 11^b which fits within the bore of the hollow body 5, being held therein by the tension of the spring 8, and effectually preventing the wedge from displacement. The transverse slot 13 in the body is of a width, as is the slot 12, properly to snugly accommodate the key 11; and the slot 13 is of sufficient height, lengthwise of the body 5, to permit the key with its head 11^b to be inserted and withdrawn, from the slots 12 and 13, in accommodation of the extension or head 11^b. Wedges are employed for both inserting and prying out the key 11, under the pressure of the spring 8, such wedges being inserted between the tapering end or ends 11^a of the key 11. The [735] lower end of the rod 9 has a T-head 9^a entering recesses 14 in the inner faces of the cutters A and B, and permitting the cutters to

D' swing upon the T-head in the collapsing and expanding movements./D' The lower end of the body 5 is bifurcated to form spaced prongs 5^a and 5^b, separated by an open space, within which the T-head 9^a plays, and said prongs have at each edge terminal portions synclinal expansion faces 5^c, producing a violent wedge action upon the cutters, and upper slightly outwardly inclined expansion and thrust-bearing faces 5^d producing final and relatively slight expansion action of the cutters, the cutters being provided with lateral extensions forming shoulders b which coact with these expansion faces 5^c and 5^d, when the cutters are raised by the spring 8 to expand the cutters, and riding over such expansion surfaces when the cutters are drawn down into collapsed positions. These shoulders b also impart some of the thrust of the cutters to the prongs in under-reaming, the remaining portion of the thrust being imparted to thrust bearings c at that portion of the hollow body 5 at which the formation of the prongs 5^a and 5^b commences, Dove-tails 15 are formed at the sides and inner edges of the prongs 5^a and 5^b, coacting with dove-tails 16 upon the sides of the cutters. These dove-tails are so arranged as to allow play to the shank 17 in the collapsing and expanding actions of the cutters. It will be understood that T-head 9^a lies across the space between the prongs 5^a and 5^b, in a plane intermediate of and parallel with the planes of the prongs. A retaining bolt 18 spans the space between the prongs adjacent to the lower ends thereof serving to limit the downward movement of the T-head 9^a and also to prevent

the cutters from falling out beneath [736] the prongs should they become disengaged from the spring actuated rod 9.

The parts are assembled from the lower end of the body 5, by first inserting the spring actuated rod 9 with its spring, then hanging the cutters upon the T-head 9^a and moving them with the rod 9 upwardly, whereupon the key 11 is wedged through the slot 13 into the slot 12, and the head 11^b is seated in the bore of the hollow body 5 which it closely fits. When it is desired to disconnect the parts of the underreamer, a suitable wedge is applied to one or both of the tapered ends 11^a of the key 11, raising it up to free the head 11^b, whereupon the key may be driven out laterally from the slots 12 and 13.

The operation and method of use of the improved underreamer will be readily understood by those skilled in the art from the above description of construction and method of use and operation. [737]

Having thus described my invention, I claim and desire to secure by Letters Patent:

I. An underreamer, comprising a hollow body, a rod movable within the hollow body, cutters connected with the rod to move with the same, means for causing the expansion of the cutters in the movement of the rod, a spring acting upon the rod to move it in one direction, and means confining the spring at one end and consisting of a wedge engaged with the hollow body and accommodated in a slot in the rod.

II. An underreamer, comprising a hollow body, a rod movable within the hollow body, cutters connected with the rod to move with the same, means

for causing the expansion of the cutters in the movement of the rod, a spring acting upon the rod to move it in one direction, and means confining the spring at one end and consisting of a wedge engaged with the hollow body and accommodated in a slot in the rod; said key having an extension seated in the bore of the hollow body.

III. An underreamer, comprising a hollow body, a rod movable within the hollow body, cutters connected with the rod to move with the same, means for causing the expansion of the cutters in the movement of the rod, a spring acting upon the rod to move it in one direction, and means confining the spring at one end and consisting of a wedge engaged with the hollow body and accommodated in a slot in the rod; said key having an extension seated in the bore of the hollow body and being tapered at one end.

IV. An underreamer, comprising a hollow body, a rod movable within the hollow body, cutters connected with the rod to move with the same, means for causing the expansion of the cutters in the movement of the rod, a spring acting upon the rod to move it in one direction, and means confining the spring at one end and consisting of a wedge engaged with the hollow body and accommodated in a slot in the rod; the hollow body [738] being provided with a transverse opening permitting the insertion and withdrawal of the key.

V. An underreamer, comprising a hollow body, a rod movable lengthwise within the hollow body, cutters connected with the rod to move with the same, means causing the expansion of the cutters in the

movement of the rod, a spring surrounding the rod and acting at one end to cause the movement of the rod, and means upon which the spring is seated at the other end; said last named means comprising a key passed through a slot in the rod enlarged lengthwise of the rod and through a transverse slot in the hollow body; said key being provided with a head adapted to be seated within the bore of the hollow body and with a tapered end portion; the slot in the hollow body being enlarged to permit insertion and withdrawal of the key with its head, and one end of the key being tapered.

VI. An underreamer, comprising a hollow body, a rod movable within the hollow body, cutters connected with the rod to move with the same, means for causing the expansion of the cutters in the movement of the rod, a spring acting upon the rod to move it in one direction, and means confining the spring at one end and consisting of a wedge engaged with the hollow body and accommodated in a slot in the rod; said key having an extension seated in the bore of the hollow body and held therein under the tension of the spring. [739]

Insert A'

IN TESTIMONY WHEREOF, I have signed my name to this specification in the presence of two subscribed witnesses.

ELIHU C. WILSON.

Witnesses:

RAYMOND I. BLAKESLEE.

ALFRED H. DAEHLER.

OATH.

State of California,
County of Los Angeles,—ss.

Elihu C. Wilson, the above-named petitioner, being sworn, deposes and says that he is a citizen of the United States and a resident of Los Angeles, Los Angeles County, State of California; that he verily believes himself to be the original, first and sole inventor of the improvements in UNDERREAMERS, described and claimed in the annexed specification; that he does not know and does not believe that the same were ever known or ever used before his invention or discovery thereof; or pretended or described in any printed publication in any country before his invention or discovery thereof; or more than two years prior to this application; or patented in any country foreign to the United States on an application filed more than twelve months before this application; or in public use or on sale in the United States for more than two years prior to this application; and that no application for patent on said improvements has been filed by him or his representatives or assigns in any country foreign to the United States.

ELIHU C. WILSON.

Subscribed and sworn to before me this 26th day of February, 1913.

[Seal]

H. H. HARRIS,
Notary Public in and for the County of Los Angeles,
State of California. [740]

MMD 2-260 LDH

Div. 38 R— 378.

Paper No. —.

Address only

All communications *resp—ing*

"The Commissioner of Patents,
Washington, D. C.," and not any
official by name.

this application should give the
serial number, date of filing, title
of invention, and name of the ap-
plicant.

Department of the Interior.

UNITED STATES PATENT OFFICE.

Washington, May 5, 1913.

Raymond I Blakeslee,

California Bldg.,

Los Angeles, Calif.

Please find below a communication for the EX-
AMINER in charge of the application of Elihu C.
Wilson, Ser. No. 755,170, filed Mar. 18, 1913; Under-
reamers.

E. B. MOORE,

c6-2631

Commissioner of Patents.

In line 9 of page 2, lines 4 and 8 of page 3, line
2 of page 4 the word—bits—is misspelled. In line
22 of page 4 the word "wedge" should be—key. In
line 7 of page 5 it is suggested that the words—
formed with—be inserted after "portions." In line
12 insert the word—extensions—after "which."

The examiner does not understand the phrase be-
ginning "and also" in the last line of page 5. Such
description should accordingly be amended.

In line 6 of Claims 1, 2, 3, 4 and 6 the word
"wedge" should be—key. In line 4 of Claim 1 the
word "in" should be—upon.

Claims 1 and 4 are rejected upon

Double, 862,317, Aug. 6, 1907,

Class 255/75, in view of

Mack, 982,514, Jan. 24, 1911,

Same class, who shows it old to have the spring bear directly against the key. It is therefore considered that there would be no invention in removing the shoulder 5 in Double and allowing the spring to bear directly against the extension 20 of his key.

Claim 2 is rejected upon the same references, the last phrase of this claim being objectionable as indefinite. [741]

Ser. No. 755,170.....2.

Claim 3 is rejected upon Double in view of Mack, cited, and

Heggem, 926,562, June 29, 1909,

Same class, wherein it is shown old to taper the end of the key.

Claim 5 is rejected upon the same references as Claim 3, it being considered that there is no invention in enlarging the slot in the rod lengthwise thereof.

Claim 6 may be allowable if properly corrected.

G. R. IDE,

Exr.

M. M. D. [742]

Paper No. 3

MAIL ROOM

Letter

DEC. 13, 1913.

U. S. PATENT OFFICE.

U. S. Patent Office,
DEC. 15, 1913.

DIVISION 38.

IN THE UNITED STATES PATENT OFFICE.

In re application of:

E. C. Wilson,

Under Reamers,

Filed Mar. 18, 1913,

Ser. No. 755,170.

Before Examiner:

Div. 38,

Room 378.

The official communication of May 5, 1913, is received.

Applicant has long suspected that an application interfering with the present application had been filed, by the patentee, Robert E. Bole of Letters Patent No. 1,080,135, for Under-reamers, issued December 2, 1913. From the disclosure of the Official Gazette there is an absolute identity of invention between the subject of this patent and the above entitled application, with respect to the essential subject matter thereof, namely, the key held in the body by the spring acting to cause the expansion of the bits or cutters.

Claim 5, for instance, of said Bole patent, apparently reads verbatim upon the structure of this application. Claim 3 of this application would seem to be practically the equivalent of claim 5 of said

Bole patent, in subject matter, reading into said claim 5 the necessary means for causing the expansion of the cutters.

Such a certain condition of interference apparently exists, as above, that it is believed the Examiner will forthwith institute such interference proceedings. It is to be regretted that they were not previously declared so that the issuance of the Bole patent might depend upon the eventuation thereof.

Further amendment will be made in due course.

Very respectfully,

RAYMOND IVES BLAKESLEE,

Attorney for Wilson.

To the Hon. Commissioner of Patents:

Dated December 8, 1913. [743]

MAIL ROOM.

Paper No. 4

DEC 15 1913

A

U. S. PATENT OFFICE.

IN THE UNITED STATES PATENT OFFICE.

In re application of :

U. S. Patent Office,

E. C. Wilson,

DEC 16 1913

Underreamers,

DIVISION 38

Filed March 18, 1913,

Serial No. 755,170.

Before Examiner: Div. 38, Room 378.

I hereby amend as follows:

Insert the following claims:

7.—An underreamer comprising a body having a central bore, a rod mounted in said bore, said body and rod provided with registering slots, a
A' key or gib loosely mounted in said slots and having means at the bottom for anchoring in said

body, a spring surrounding said rod and connected thereto at the top thereof, and operatively connected to said key at its lower end, said rod provided with bit engaging means.

8.—An underreamer comprising a body having a central bore, a rod or mandrel mounted in said bore, said body and rod provided with registering slots, a key or gib mounted in said slots and having a projection or wing fitting within the bore of said mandrel below said slots and shouldering against the wall upon transverse movement in either direction, a spring mounted on said gib and operatively connected with said rod, said rod provided at its lower end with bit engaging and supporting means, said rod being enlarged at its lower end and provided with surfaces adapted to support the inner ends of the bits or cutters, and bits or cutters mounted on said rod.

9.—An underreamer comprising a body having a central bore, a rod mounted to reciprocate in said bore, said body and rod provided with slots, a key mounted in said slots, said key having a projection or wing projecting downward [744] from the slot of the body into the central bore and preventing lateral motion of the key, a spring mounted on said key and coiled about said rod, means at the upper end of said rod adjustably connecting said rod and spring, means at the lower end of said rod for engaging and supporting the bits or cutters, and cutters or bits.

10.—An underreamer comprising a body having a central bore, a rod or mandrel mounted in said bore,

said body provided with a slot, said rod provided with a longitudinal slot, a key or gib mounted in said slot and provided with a downwardly projecting portion adapted to contact with the wall of the central bore below said

Per C lateral slot and prevent lateral/displacement of the key from either side of the slot, a spring mounted on said gib and operatively connected with said rod, said rod provided at its lower end with a bit engaging head or key.

Insert B'

This amendment is presented to supplement the paper dated December 8, 1913, for the purpose of assisting in the institution of Interference proceedings, as requested. The further claims of the interfering patent are not before applicant's attorney as yet, and if the Examiner thinks such other claims should be suggested for incorporation in applicant's case, prior to declaration of interference, it is requested that such suggestion be made at an early date.

Very respectfully,
RAYMOND IVES BLAKESLEE,
Attorney for Wilson.

To Hon. Commissioner of Patents:

Dated Dec. 9, 1913. [745]

Paper No. —

MKP 2-260—LDH

Div. 38 R—378

Paper No. —.

Address only

All communications *resp—ing*

"The Commissioner of Patents,
Washington, D. C.," and not any
official by name.

this application should give the
serial number, date of filing, title
of invention, and name of appli-
cant.

Department of the Interior.

UNITED STATES PATENT OFFICE.

Washington. Dec. 17, 1913.

MAILED. " " "

Raymond I. Blakeslee,

California Bldg.,

Los Angeles, Calif.

Please find below a communication from the EX-
AMINER in charge of the application of Elihu C.
Wilson, Ser. No. 755,170, filed Mar. 18, 1913: Under-
reamers.

THOMAS EWING,

Commissioner of Patents.

c6-2631.

In Claim 10, line 7, "later" should be—lateral.

The following claims contained in the patent with
which applicant requests interference should be in-
cluded in the issues of such interference and are
herewith suggested to applicant:

An underreamer comprising a body having a cen-
tral bore, a rod or mandrel mounted in said bore,
said body and rod provided with registering slots, a
key or gib mounted in said slots, the slot in the rod
being of sufficient longitudinal extension to permit
the movement of said rod longitudinally of said
body, a key or gib loosely mounted in said slots and
having a projection or wing projecting downward

into the central bore below the walls of the slot in the body and anchoring said key or gib against movement transversely of said body, a spring mounted on said gib and operatively connected with said rod, said rod provided at its lower end with bit engaging means, bits tiltingly carried thereby, and bearings for the inner faces of said bits formed on said rod and adapted to prevent lateral displacement of said bits.

An underreamer comprising a body having a central bore, a spring actuated rod mounted in said bore, said rod [746] provided with bit carrying means, and a key loosely mounted in said body and held therein by the tension of said spring.

An underreamer comprising a hollow body, a spring-actuated rod mounted therein and provided with bit carrying means, and a key loosely mounted in said body and operatively connecting said rod and body.

An underreamer comprising a hollow body, a reciprocating rod, a spring and a key operatively mounting said rod in said body, said key fitting loosely in said body and held therein by spring tension on the top, and means preventing the key sliding laterally in the body without overcoming the downward pressure of the spring on the key.

Ser. No. 755,170— 2.

Applicant is required to make the above claims on or before January 17, 1914, and to correct Claim 10 as noted above in order that the declaration of the interference be not unnecessarily delayed.

Failure to make the claims above suggested within

the time specified will be taken without further action as a disclaimer of the invention covered thereby as provided in Rule 96.

G. R. IDE,
Exr.

MKP. [747]

MAIL ROOM.

Paper No. 6

DEC 26, 1913.

U. S. PATENT OFFICE

B

IN THE UNITED STATES PATENT OFFICE.

In re application of:	U. S. Patent Office,
E. C. Wilson,	DEC 27 1913
Underreamers,	DIVISION 38.
Filed March 18, 1913,	Before Examiner:
Ser. No. 755,170.	Div. 38.
	Room 378.

I hereby amend as follows:

Insert the following claims:

11.—An underreamer comprising a body having a central bore, a spring actuated rod mounted in said bore, said rod provided with bit carrying means, and a key loosely mounted in said body and held therein by the tension of said spring.

12.—An underreamer comprising a hollow body,
B' a spring actuated rod mounted therein and provided with bit carrying means, and a key loosely mounted in said body and operatively connecting said rod and body.

13.—An underreamer comprising a hollow body, a reciprocating rod, a spring and a key operatively mounting said rod in said body, said key fitting loosely in said body and held therein by spring ten-

sion on the top, and means preventing the key sliding laterally in the body without overcoming the downward pressure of the spring on the key.—

Insert C'

This amendment is presented to supplement the papers dated December 8th and December 9th, and in order that interference may be comprehensively declared between this application and the Bole patent 1,080,135.

Early declaration of interference is awaited.

Very respectfully,

RAYMOND IVES BLAKESLEE,

Attorney for Wilson.

To Hon. Commissioner of Patents:

Dated December 20, 1913. [748]

MAIL ROOM.

Paper No. 7

DEC 27 1913

C

U. S. PATENT OFFICE.

IN THE UNITED STATES PATENT OFFICE.

In re application of

U. S. Patent Office,

Elihu C. Wilson,

DEC 29 1913

Underreamers,

DIVISION 38.

Filed March 18, 1913,

BEFORE EXAMINER.

Serial Number 755,170.

DIVISION 38.

Room 378.

I hereby amend as follows:

Substitute for "later," line 7, claim 10:

(—lateral—)

Insert the following claim:

14. An underreamer comprising a body having a central bore, a rod or mandrel mounted in said bore, said body and rod provided with registering slots, a

key or gib mounted in said slots, the slot in the rod being of sufficient longitudinal extension to permit the movement of said rod longitudinally of C' said body, a key or gib loosely mounted in said slots and having a projection or wing projecting downward into the central bore below the walls of the slot in the body and anchoring said key or gib against movement transversely of said body, a spring mounted on said gib and operatively connected with said rod, said rod provided at its lower end with bit engaging means, bits tiltingly carried thereby, and bearings for the inner faces of said bits formed on said rod and adapted to prevent lateral displacement of said bits.

The Official communication of December 17, 1913, has been received.

Three of the claims suggested therein have already been made, in amendment dated December 20, 1913. Th other claim [749] is made as suggested, but is made with a reservation of the right to cancel if the applicant be so advised, because of a particular feature thereof, relating to the tilting of the bits, which is a matter of specific doubt, because of the term "tilting." The interests involving this invention, under other patents for different strucures, have been engaged in a long drawn-out litigation in which there was violent discussion as to the meaning of the word "tilting." The pendency of this litigation makes it still more unfortunate that there was delay in declaring this interference, and applicant therefore makes the reservation above noted for proper protection of his rights, but does not wish

that reservation to bar him against the inclusion of the claim herein presented in the coming interference, if the Patent Office so construes that claim as to believe it proper that it should be included in the interference, and that applicant would be entitled to it if he prevails.

As there has been threatened suit for infringement against applicant's interests, under this Bole patent, the earliest possible declaration of interference will be of vital advantage. To that end it is believed that the Office, under the circumstances, should cooperate expeditiously with applicant, who is instanter presenting this amendment, in order that as little complication as possible may result from the delay in declaring this interference.

Very respectfully,
RAYMOND IVES BLAKESLEE,
Attorney for Wilson.

To Hon. Commissioner of Patents,
Washington, D. C.

Dated at Los Angeles, California, December 22,
1913. [750]

MKP 2-260—LDH

Div. 38 R—— 378.

Paper No. —.

Address only

All communications *resp—ing*

“The Commissioner of Patents,
Washington, D. C.,” and not any
official by name.

this application should give the
serial number, date of filing, title
of invention, and name of the ap-
plicant.

Department of the Interior.

UNITED STATES PATENT OFFICE.

Washington. Jan. 2, 1914.

MAILED “ “ “

Raymond I. Blakeslee,
California Bldg.,
Los Angeles, Calif.

Please find below a communication from the EX-
AMINER in charge of the application of Elihu C.
Wilson, Ser. No. 755,170, filed Mar. 18, 1913: Under-
reamers.

THOMAS EWING,
c6-2631. Commissioner of Patents.

In response to the communications filed Dec. 26
and 27, 1913:

It is noted that Claim 14, in lines 12, 13 and 14,
recites “bearings for the inner faces of said bits”
etc., while these bearings are shown in the drawings
as flattened faces at the sides of the rod 9 just above
the projections 9^a, they are not described in the
specification. An amendment to the specification
describing this feature and accompanied by the sup-
plemental oath required by Rule 48 must be filed or

Claim 14 must be canceled before the proposed interference can be declared.

MKP.

G. R. IDE,
Exr. [751]

Paper No. 9.

Amdt. D. & Supp'l. Oath.

MAIL ROOM.

JAN 12, 1914.

U. S. PATENT OFFICE.

IN THE UNITED STATES PATENT OFFICE.

In re application of	BEFORE EXAMINER.
Elihu C. Wilson,	DIVISION 38.
Underreamers,	U. S. Patent Office,
	ROOM 378.

Filed March 18, 1913,	JAN 13 1914
Serial Number 755,170.	DIVISION 38.

SUPPLEMENTAL OATH.

State of California,
County of Los Angeles,—ss.

Elihu C. Wilson, being duly sworn, deposes and says that he is the applicant named in the above-entitled application for patent; that the subject-matter of the proposed amendment herunto attached and pertaining to the bearing surfaces 9^b, and pertaining to the subject-matter of claim 14 of record in this application, was part of his invention and was invented before he filed his said application; that he does not know and does not believe that the same was known or used before his invention thereof; or patented or described in any printed publication in any country before his invention or discovery thereof or more than two years prior to said application; or

patented to himself or to others with his knowledge or consent in the United States or any foreign country on an application filed more than twelve months prior to his said application, or in public use or on sale in the United States for more than two years before the date of said application; that no application for patent on said improvements has been filed by him or his representatives or assigns in any [752] foreign country; and that the same has not been abandoned.

ELIHU C. WILSON.

Subscribed and sworn to before me this 7th day of January, 1914.

[Seal]

V. J. COBB,

Notary Public in and for the County of Los Angeles,
State of California. [753]

MAIL ROOM.

Jan. 12, 1914.

U. S. PATENT OFFICE.

IN THE UNITED STATES PATENT OFFICE.

In Re Application of ELIHU C. WILSON, Under-
reamers. Filed March 18, 1913. Serial Num-
ber 755,170.

BEFORE EXAMINER.

DIVISION 38.

ROOM 378.

I hereby amend as follows:

Insert after the sentence ending in line 4, page 5:

D' Above the T-head 9^a the rod 9 has bearing sur-
faces 9^b for the inner faces of the cutters or bits,
preventing lateral displacement of the bits.

The official communication of January 2, 1914, is received.

It is requested that the examiner place upon the drawing the reference character "9^b" as indicated upon the blue-print filed herewith. The required addition to the specification concerning these bearing surfaces 9^b has been made, and the supplemental oath required is filed herewith.

Early declaration of interference is awaited.

Very respectfully,

RAYMOND IVES BLAKESLEE,

Attorney for Wilson.

To Hon. Commissioner of Patents.

Washington, D. C.

Dated at Los Angeles, California, January 7, 1914.

[754]

Mail Room, Jan. 12, 1914. U. S. Patent Office,
Jan. 13, 1914. Division 38. June 5, 1914.

JUN 3 1914

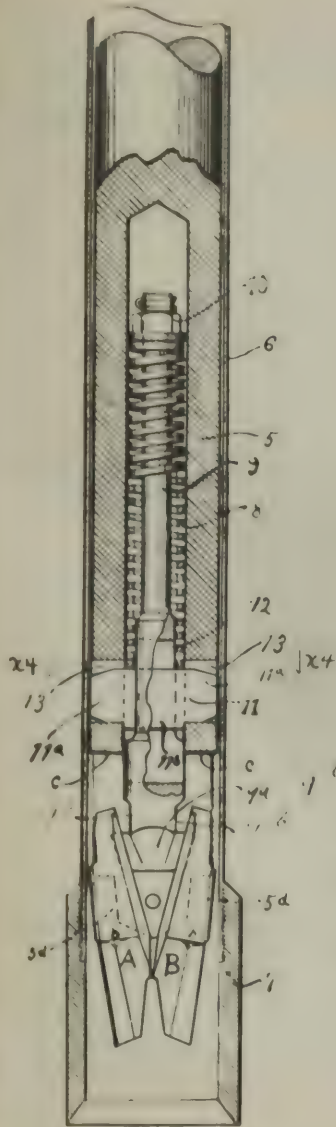


Fig. 1.

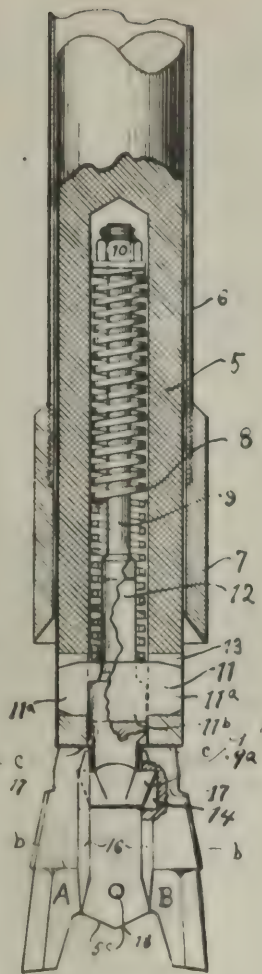


Fig. 2.



Fig. 3.

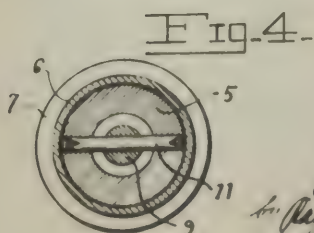


Fig. 4.

WITNESSES
 Alfred H. Drahtler
 D. M. Cummings

INVENTOR,
 E. L. Wilson
 His Attorney
 761

2-213.

Forwarded from Div. 38 to Paper No. 10
Examiner of Interferences. (Interference.)

Jan. 21, 1914.

Department of the Interior,
UNITED STATES PATENT OFFICE.

Washington, D. C.
U. S. PATENT OFFICE,
INTERFERENCE DIVISION.

Feb. 3, 1914.

MAILED.

Raymond I. Blakeslee,
California Bldg.,
Los Angeles, Calif.

Please find below a copy of a communication from
the
the Examiner concerning ~~your~~ application of Elihu
C. Wilson, Ser. No. 755,170, filed Mar. 18, 1913,
Underreamers.

Very respectfully,
THOMAS EWING,
Commissioner of Patents.

Room No. 378.
Address only
The Commissioner of
Patents, Washington,
D. C.
6-1636

37126.

The
~~Your~~ case, above referred to, is adjudged to inter-

fere with others, hereafter specified, and the question of priority will be determined in conformity with the Rules.

The statement demanded by Rule 110 must be sealed up and filed on or before Mar. 16, 1914, with the subject of the invention, and name of party filing it, indorsed on the envelope. The subject matter involved in the interference is:

Count 1. An underreamer comprising a body having a central bore, a rod or mandrel mounted in said bore, said body provided with a slot, said rod provided with a longitudinal slot, a key or gib mounted in said slot, and provided with a downwardly projecting portion adapted to contact with the wall of the central bore below said slot and prevent lateral displacement of the key from either side of the slot, a spring mounted on said gib and operatively connected with said rod, said rod provided at its lower end with a bit engaging head or key.

Count 2. An underreamer comprising a body having a central bore, a rod mounted to reciprocate in said bore, said body and rod provided with slots, a key mounted in said slots, said key having a projection or wing projecting downward from the slot of the body into the central bore, and preventing lateral motion of the key, a spring mounted on said key and coiled about said rod, means at the upper end of said rod adjustably connecting said rod and spring, means at the lower end of said rod for engaging and supporting the bits or cutters, and cutters or bits. [756]

Count 3. An underreamer comprising a body

having a central bore, a rod or mandrel mounted in said bore, said body and rod provided with registering slots, a key or gib mounted in said slots, and having a projection or wing fitting within the bore of said mandrel below said slots and shouldering against the wall upon transverse movement in either direction, a spring mounted on said gib and operatively connected with said rod, said rod provided at its lower end with bit engaging and supporting means, said rod being enlarged at its lower end and provided with surfaces adapted.

Ser. No. 755,170 — 2.

Wilson v. Bole.

to support the inner ends of the bits or cutters, and bits or cutters mounted on said rod.

Count 4. An underreamer comprising a body having a central bore, a rod or mandrel mounted in said bore, said body and rod provided with registering slots, a key or gib mounted in said slots, the slot in the rod being of sufficient longitudinal extension to permit the movement of said rod longitudinally of said body, a key or gib loosely mounted in said slots and having a projection or wing projecting downward into the central bore below the walls of the slot in the body, and anchoring said key or gib against movement transversely of said body, a spring mounted on said gib and operatively connected with said rod, said rod provided at its lower end with bit engaging means, bits tiltingly carried thereby, and bearings for the inner faces of said bits formed on said rod and adapted to prevent lateral displacement of said bits.

Count 5. An underreamer comprising a body

having a central bore, a rod mounted in said bore, said body and rod provided with registering slots, a key or gib loosely mounted in said slots and having means at the bottom for anchoring in said body, a spring surrounding said rod and connected thereto at the top thereof, and operatively connected to said key at its lower end, said rod provided with bit engaging means.

Count 6. An underreamer comprising a body having a central bore, a spring actuated rod mounted in said bore, said rod provided with bit carrying means, and a key loosely mounted in said body and held therein by the tension of said spring.

Count 7. An underreamer comprising a hollow body, a spring actuated rod mounted therein and provided with bit carrying means, and a key loosely mounted in said body and operatively connecting said rod and body.

Count 8. An underreamer comprising a hollow body, a reciprocating rod, a spring and a key operatively mounting said rod in said body, said key fitting loosely in said body and held therein by spring tension on the top, and means preventing the key sliding laterally in the body without overcoming the downward pressure of the spring of the key.

The interference involves your application above identified, and

A patent for an Underreamer, filed by Robert E. Bole, of 1114 W. 16th St., Los Angeles, California, Feb. 19, 1913, Ser. No. 749,343, patented Dec. 2, 1913, patent No. 1,080,135: [757] attorneys—Lyon & Hackley, of Merchants' Trust Bldg., Los Angeles,

Calif., and assignee:—Edward Double, of Los Angeles, Calif.

The relation of the counts of the interference to the claim of the respective parties is as follows:

Ser. No. 755,170 — 3.				<i>Eilson v. Bole.</i>			
Counts.				Wilson. Bole			
1	.	.	.	10	.	.	1
2	.	.	.	9	.	.	2
3	.	.	.	8	.	.	3
4	.	.	.	14	.	.	4
5	.	.	.	7	.	.	5
6	.	.	.	11	.	.	6
7	.	.	.	12	.	.	7
8	.	.	.	13	.	.	8

Claims 1 to 6, inclusive, will be held subect to the decision in the interference and for revision and restriction, under Rule 96.

MKP.

G. R. IDE,

Examiner, Division 38. [758]

2-079.

Interference No. 37126.

Paper No. 11.

Name, Elihu C. Wilson,

Serial No. 755,170.

Title, Underreamers,

Filed, Mar. 18, 1913,

Interference with Robt. E. Bole,

1255/4/C.

DECISIONS OF

Primary Examiner,

Dated,

Ex'r of Interferences,

Dated,

Board,

Dated,

Commisioner,

Dated,

REMARKS:

This should be placed in each application or patent involved in interference in addition to the interference letters by Primary Examiner. 6-1970. [759]

1913.

CONTENTS:

1. Application Papers.
2. Rej. May 5/13.
3. Letter. Dec. 13/13.
4. Amdt. A. Dec. 15/13.
5. Letter X. Dec. 17/13.
6. Amdt. B. Dec. 26/13.
7. Amdt. C. Dec. 27/13.
8. Letter. Jan. 2/14.
9. Amdt. D & Supp'l. Oath. Jan. 12/14.
10. Intf. Letter Feb. 8, 1914.
11. " Memo.

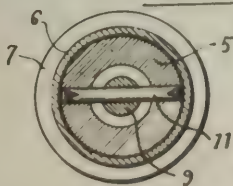
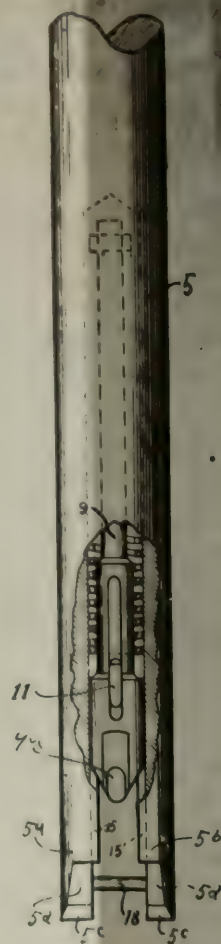
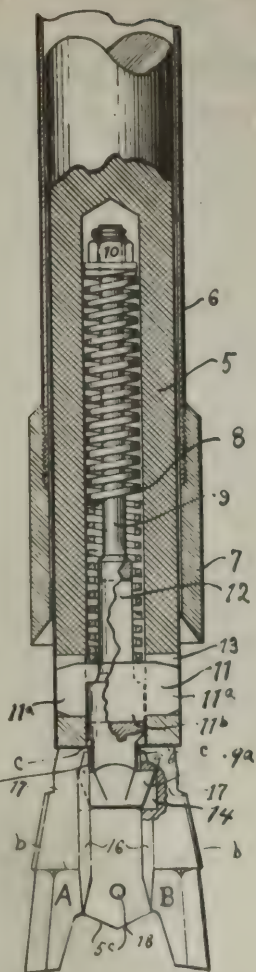
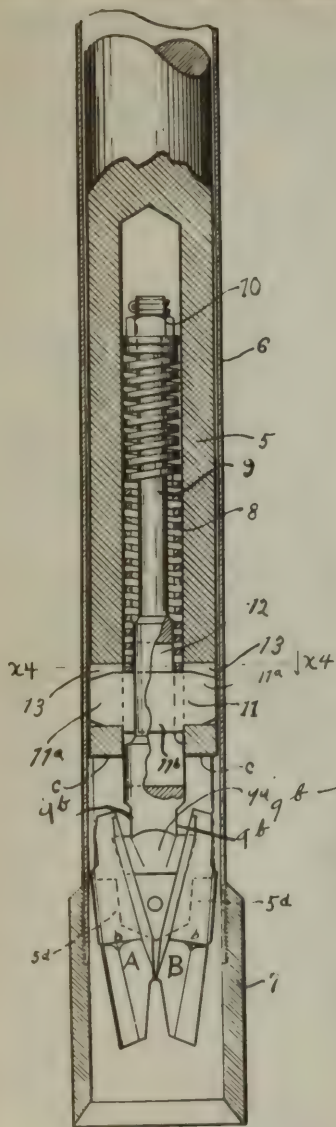
U. S. Patent Office,

Mar. 20, 1913.

Division 38. [760]

Mail Room
Jan. 12 1914
U. S. Patent Office

U. S. Patent Office
Jan 13 1914
Division 38.



(Seal)

WITNESSES
Alfred H. Daehler
S M Cummings

INVENTOR,
E. L. Wilson
H. Raymond & Co. Attorneys
HIS ATTORNEY

**[Defendants' Exhibit 17—Certified Copy File-
Wrapper and Contents, Decision in Interference
Proceeding No. 37,126.]**

2—390.

UNITED STATES OF AMERICA,

Department of the Interior,

United States Patent Office.

To all to whom these presents shall come, Greeting:

THIS IS TO CERTIFY that the annexed is a true copy from the Records of this Office of the Decision of the Examiner of Interferences, dated March 20, 1915, in the matter of

Interference Number 37,126.

Wilson vs. Bole, Subject Matter: Underreamer.

B-19-Eq. U. S. Dist. Court, So. Dist. Cal., So. Div. Bole et al vs. Wilson & Willard Mfg. Co. et al. Deft's Exh. 17. Filed Apr. 12, 1915. Wm. M. Van Dyke, Clerk. By Leslie S. Colyer, Deputy.

IN TESTIMONY WHEREOF I have hereunto set my hand and caused the seal of the Patent Office to be affixed at the City of Washington, this 30th day of March, in the year of our Lord one thousand nine hundred and fifteen and of the Independence of the United States of America the one hundred and thirty-ninth.

[Patent Office Seal]

J. T. NEWTON,

Acting Commissioner of Patents.

Canceled 10¢ Internal Revenue Stamp. Mar. 30, 1915. U. S. Patent Office. [762]

Final Hearing.

January 18, 1915.

JHD.

In the United States Patent Office.

Wilson v. Bole.

Patent Interference No. 37,126.

Underreamer.

Application of Elihu C. Wilson, filed March 18, 1913, No. 755,170.

Patent of Robert E. Bole, No. 1,080,135, issued Dec. 2, 1913, application filed Feb. 19, 1913, No. 749,343.

Mr. RAYMOND IVES BLAKESLEE and
Mr. H. S. HILL, for Wilson.

Mr. FREDERICK S. LYON and Mr. C. A.
MASON, for Bole.

This interference involves the patent issued to Bole on December 2, 1913, upon an application filed February 19, 1913; and the application of Wilson filed March 18, 1913.

The subject matter involved relates to underreamers, and is defined in eight counts of which the following are sufficiently illustrative of the invention:

Count 1.

An underreamer comprising a body having a central bore, a rod or mandrel mounted in said bore, said body provided with a slot, said rod provided with a longitudinal slot, a key or gib mounted in said slot, and provided with a downwardly projecting portion adapted to contact with the wall of the central bore below said slot and prevented lateral dis-

placement of the key from either side of the slot, a spring mounted on said gib and operatively connected with said rod, said rod provided at its lower end with a bit engaging head or key.

Count 6.

An underreamer comprising a body having a central bore, a spring actuated rod mounted in said bore, said rod provided with bit carrying means, and a key loosely mounted in said body and held therein by the tension of said spring. [763]

Count 7.

An underreamer comprising a hollow body, a spring actuated rod mounted therein and provided with bit carrying means, and a key loosely mounted in said body and operatively connecting said rod and body.

The invention relates to underreamers, such as are employed in enlarging oil wells and other well holes, and it is stated in both the patent to Bole and in the Wilson application involved that the invention constitutes an improvement over the underreamer disclosed in a prior patent to Wilson, No. 827,575, dated July 31, 1906. The essential features of that device necessary to an understanding of the present invention are an exterior tubular casing forming the lining of the well, and the underreamer proper, which is lowered therethrough toward the bottom of the well. The underreamer itself comprises a casing or body-containing portion of cylindrical bore, within which is spring mounted for longitudinal movement, a rod termed a mandrel or tee, and from the lower extremity of which the cut-

ters are pivoted. When the underreamer is lowered sufficiently to clear the cutters from the well casing, the tee, under the normal tension of the spring, is drawn into position expanding the cutters for the enlarging or underreaming operation. This work entails severe wear upon the cutters, and from time to time their renewal and replacement is necessary, to accomplish which the tee to which they are pivoted must itself be capable of ready removal from the body portion of the underreamer. To attain this, the tee is supported within the cylindrical bore of the underreamer solely by the spring, which surrounds the same and which in turn is supported by a block or spring-seat removably attached by dowel pins within the cylindrical bore of the underreamer body. To gain access to the parts necessary for replacement of the cutters, it is only necessary therefore to withdraw the dowel pins from the spring-seat, when the parts are [764] removable longitudinally from the cylindrical bore of the body-portion. It was found, however, that in an underreamer which had been subjected to considerable use; the dowel pins are difficult to remove, and then only by the slow process of drilling them out. The present invention provides a more readily removable spring-seat than the block and pin device of Wilson's prior patent. The body portion of the underreamer, and the tee, are slotted, and through the slot laterally across the bore of the body-portion, is inserted a one-piece key having, in the language of count 1,

“A downwardly projecting portion adapted to contact with the wall of the central bore be-

low said slot and prevent lateral displacement of the key from either ends of the slot."

This key being held in place only by the tension of the spring upon it, is readily removable through the same slot by which it was inserted, by an upward pressure exerted upon the key against its spring sufficient to free the downwardly projecting portion and then by a lateral drive sufficient to remove the key through the slot.

The allegations in the preliminary statements of the parties are as follows:

Wilson.	Bole.
Conception—January 26, 1911.	Sept. 12-20, 1908.
Drawings—Feb. 1—Apr. 22, 1911.	" " "
Disclosure—February 3, 1911.	" " "

Reduction to practice—May 29, 1911.

In addition, Bole alleges disclosure of the invention to his opponent, and claims the benefit of his opponent's reduction to practice of the same.

Both parties have taken testimony to substantiate these allegations.

Many of the events relating to the development and manufacture [765] of the improved underreamer embodying the invention are not in dispute. Wilson was, for some years prior to the earliest date alleged for the present invention, a manufacturer of underreamers. His first underreamer preceded the block and pin construction already referred to. This type, like the present one, employed the slot and key form of spring-seat. This key, however, differed from that of the present invention in being formed of two pieces instead of one, and the two types are known

throughout the testimony of both parties as the two-piece and the one-piece key underreamer, respectively. The earlier type is illustrated in "Wilson's Exhibit Photo. B of Wilson's Reamer 2-piece key device." The two pieces were superposed, the uppermost having a wedging action which together with a screw inserted through the underreamer body held both pieces in place. The key was not, therefore, unattached and freely removable as in the present invention.

The earliest type of underreamer was manufactured up to about 1907 by the Bakersfield Iron Works at Bakersfield, California, under Wilson's directions as general manager of that company. In 1907, the Wilson and Willard Manufacturing Company was organized with shops and offices at Los Angeles, California, with Wilson as President, and Willard as Vice-president and Treasurer. The manufacture of the Wilson underreamer was transferred to that company, Wilson, however, not taking up resident work at Los Angeles until June, 1909.

The two-piece key underreamer was found defective, due in part to the difficulty in removing the key, and in part to the liability of breakage of the tee because of the slot through which the key was inserted. Sometime in 1907, therefore, this type was discontinued and the block and pin type, already described, was adopted, the latter type having no slot in the tee and therefore being less subject to breakage in this portion. This is the type that was being manufactured by the Wilson and [766] Willard Manufacturing Company at the respective dates,

September, 1908, and January, 1911, alleged by Bole and Wilson for conception and disclosure of the one-piece key type embodying the present invention.

Bole has been for a number of years prior to September, 1908, closely associated with both Wilson and Willard, working under Wilson at the Bakersfield Iron Works until 1907, and then as an employee of the newly formed Wilson and Willard Manufacturing Company. As the inventor of a pump known as the Bole pump, Bole, however, soon acquired an independent status with the Wilson and Willard Manufacturing Company, the Bole Pump Company being organized with Bole and Willard as partners, and the Wilson and Willard Manufacturing Company acting as their manufacturer. The latter company was, in fact the manufacturer of both the Bole pump and the Wilson underreamer, and the accounts for these manufactureres was carried separately on the books of that company in the name of the Bole Pump Company, and Wilson, respectively. It also appears, that, in addition to this relation of the parties, Bole acted from time to time as salesman for Wilson, for it was while soliciting an order for a Wilson underreamer of the block and pin type that, as Bole testifies, he conceived and disclosed the present invention in September, 1908. This relation of the parties continued until January, 1913, when a controversy arose in regard to the overdue accounts of the Bole Pump Company. A settlement was effected, and Bole transferred the manufacture of his pump to the Union Tool Company, a competitor in the

underreamer field with Wilson and Willard Manufacturing Company, and whose president, Edward Double, is the assignee of one half interest in Bole's present patent.

Bole, as already stated, testifies to conception and disclosure of the invention in September, 1908. Upon this occasion, he testifies he was calling upon one Heber, foreman of the Sunset [767] Monarch Oil Company, who informed him that although the company was then in need of an underreamer, such trouble had been experienced in drilling out the pins of the block and pin type of Wilson underreamer, that they would not consider the purchase of another. Bole states (Q. 8) that to meet this situation, he devised and disclosed to Heber the one-piece key underreamer of his present patent. A sketch was made, he states (Qs. 10-17), of the underreamer with the key, slotted tee, and cutters in place. The proposed improvements were also disclosed, Bole states (Q. 14), to one Adams, a machinist in the shops of the Sunset Monarch Oil Company, who was very emphatic in his objections to the old type of underreamer. Bole does not say, however, whether the latter disclosure was by way of a sketch or by oral description.

Upon this disclosure, Bole testifies (Qs. 34-37), Heber gave him an order for such an underreamer, and a letter was immediately dispatched to the Wilson and Willard Manufacturing Company containing a description and sketches of the same. The instructions for making the new device, he states (Qs. 38-40), also included a heavier tee to overcome the liability to breakage found in the slotted tee of the early

two-piece key type.

Bole's witnesses, Heber and Adams, testify in regard to disclosure of the one-piece key underreamer to them in September, 1908. Both refer to the occasion of the proposed order for a Wilson underreamer by the Sunset Monarch Oil Company on that date, and of the difficulties experienced in the use of previous types of this device. While Bole states that he gave a detailed disclosure to Heber, not only of the one-piece key, but of the parts of the underreamer which cooperate therewith, Heber can recall only the key itself, a sketch of which he makes, and he states, (XQ, 191), that he is positive Bole disclosed no other [768] portion of an underreamer. In fact, upon the production of the sketch (Q. 27), he displays uncertainty as to whether his recollection extends back to the original disclosure or is of more recent origin. He also admits (XQ. 48, 51), that he had never seen, and was totally unfamiliar with, the only type of underreamer with which a key can be used, namely, the slotted tee type.

Adams was more familiar with the various types of the Wilson underreamer. His testimony however is very meager in regard to details of the structure disclosed, and he, like the witness Heber, appears able only to make a sketch of the key. Adams does refer (Q. 26), it is true, to a tool for removing the key but he says nothing of the tee with its slot or of the location of the spring upon the key.

It seems unlikely that without a more detailed disclosure of the parts of the underreamer which were to cooperate with the key, than is shown by the tes-

timony of these witnesses, that they would have remembered this one element of the invention, even though it is the most distinguishing feature, after the lapse of six years.

Moreover, while both Heber and Adams fix the time of this disclosure by the date of September, 1908, order for an underreamer, which was to overcome the difficulties experienced in previous devices of this character, the underreamer actually delivered upon this order embodied no departures from the block and pin type which was then being manufactured by the Wilson and Willard Manufacturing Company. Nor does the testimony of Heber and Adams indicate that the filling of the order by the then standard type of underreamer was contrary to their expectations or that it created any surprise; for both state, (Heber XQ, 76, Adams XQ. 120, 121), that no complaint was made and that they did not even discuss the matter among themselves. If such an event made so little impression upon [769] these witnesses at that time and was regarded as of so little importance, it is difficult to see how it could fix a date of disclosure of the proposed improvements after the lapse of six years.

While the determination of the question involved in this case, that of originality of invention, is not to be based upon the testimony of these witnesses or in fact upon any one portion of the evidence presented, but rather upon the entire testimony in behalf of both parties together with the surrounding circumstances of the case, it may now be said that the testimony of the witnesses Heber and Adams in regard to dis-

closure of the invention to them in September, 1908, does not carry conviction.

The receipt of this September, 1908, order with proposed changes embodying the present invention at the offices of the Wilson and Willard Manufacturing Company is denied by Wilson and by his brother W. W. Wilson. Wilson himself had not as yet taken up the work for the Wilson and Willard Manufacturing Company requiring his presence at its place of business but he appears to have maintained a general supervision of affairs by correspondence. W. W. Wilson testifies that he was at this time in charge of the office records of the company, that he distinctly recalls the September, 1908, order obtained by Bole from the Sunset Monarch Oil Company and that he entered such order upon the books of the Wilson and Willard Manufacturing Company, but that the order called for no change in the block and pin underreamer the company was then manufacturing. The testimony of Willard, who appears to have been in active charge of the shop management at this time, is somewhat at variance with that of W. W. Wilson. W. W. Wilson testifies that the order was given verbally by Bole after his return from his September 1908 trip. Willard insists that the order was by letter received before Bole's return. Upon every other point, however, the testimony of Willard is so contradictory that [700] it is of little value in determining who was the inventor of the device in controversy. Upon the taking of Wilson's *prima facie* evidence, Willard testifies (Q. 154) that accompanying Bole's order "there was some

suggestion made for changing the method of holding the tee-bar and spring''; and upon cross examination (XQ. 371) he even goes so far as to state that a sketch of a key device accompanied the order. Upon Wilson's rebuttal proofs, however, he states positively (RXQ. 183) that no sketch accompanied the order. Upon rebuttal, his testimony also involves further contradictory statements; for he first testifies (RDQ. 124, 127) that Bole's September 1908 order involved no changes over the standard underreamer then being manufactured, and later he states (XQ. 237-8), that while no sketch accompanied the order, there was some suggestion in the letter of a change from the standard type but that he has no recollection of its nature.

The testimony of Willard is equally unsatisfactory in regard to events alleged by Bole to have occurred subsequent to the September 1908 order but prior to Wilson's alleged date of conception. Bole testifies (Q. 66-8) that upon his return to the Wilson and Willard Manufacturing Company, he took the matter of the proposed changes in the Wilson underreamer up with Willard, and that the latter informed him that the suggestions had been referred to Wilson, who was then at Bakersfield, California, but that Wilson was unwilling to make the device as ordered. Willard, on Wilson's *prima facie* proofs, (Q. 399), states that he recalls the conversation with Bole in regard to the order and that Bole expressed great disappointment because the underreamer was not shipped as ordered, and he intimates (Q. 398), although he does not positively so state, that the pro-

posed changes had been submitted to Wilson and that they did not meet with his approval. On rebuttal, however, (Q. 9), Willard testifies that he recalls no such conversation [771] with Bole, and that (Q. 12,11) in no respect whatever did he mention any proposed changes to Wilson. Wilson himself denies that any suggestions accompanying Bole's September 1908 order were submitted to him.

At various times after Wilson took up his work at the Wilson and Willard Manufacturing Company in June 1909, and before Wilson's alleged date of conception, Bole also testifies (Q. 73-82), he urged upon Wilson the adoption of the one-piece key type of underreamers, but that his suggestions were not accepted until sometime in the spring of 1911, when orders for the block and pin type were falling off and some improvement had to be made. Bole states (Q. 90) that Wilson was particularly pleased with the suggestions as to a heavier tee, and that an old style underreamer was remodeled to include this tee; that later Wilson agreed to include the one-piece key, and that a shop order accompanied by a sketch with his (Bole'?) name thereon was made out, and the device made up under his instructions.

On one of these occasions of disclosure to Wilson, Bole states (Q. 81) that the foreman of his pump department, Naphas, was present. Naphas, however, is not called to testify and Wilson (Q. 299) denies such disclosures.

This old type of underreamer referred to by Bole as changed at his solicitation to embody the invention was, however, reconstructed to embody this im-

provement and constitutes the reduction to practice relied on by both parties. The earliest shop order for this work, offered in evidence is "Wilson's Exhibit February 1911, Wilson and Willard Manufacturing Company Shop Record Slips" is dated February 3, 1911. The question is whether the invention embodied in this underreamer, referred to throughout the testimony as underreamer No. 120, originated with Bole or Wilson.

Wilson testifies to conception and disclosure of the invention sometime between January 26, 1911, and the date, February 3, 1911, [772] of the shop order above referred to.

On the earlier date, he states he received an order for the two-piece key type of underreamer with the slotted tee, the manufacture of which had been discontinued some years before due to the weakness in the slotted tee and the difficulty in removing the two-piece key. This order led to a reconsideration of the former type of underreamer to determine if improvements in its design could not be effected. The result attained, Wilson states, was a tee of enlarged and stronger design, and attention was then directed to designing a single-piece key. About February 3, 1911, Wilson testifies, he called a conference of his associates, including Bole, to consider the adoption of the said designs. Although Bole denies that such a conference occurred or that he was present, and although Willard, testifying in behalf of Wilson, has no recollection of the same, the testimony of W. W. Wilson and of the Witness Wilcox, also an employee of the Wilson and Willard Manufac-

turing Company, is believed to be clearly sufficient to establish that the conference did take place at the date alleged, that the invention was discussed, and that Bole was present. The contention on behalf of Bole in regard to this conference is, that admitting the events testified to by these witnesses occurred, it merely established that the invention was discussed at this conference and not that it originated with Wilson; and that, in fact, in the absence of positive evidence to the contrary, the invention then disclosed must be presumed to be Bole's. This contention is believed to be unwarranted since *so* presumption of possession of the invention by either party prior to their filing dates arises because of their relation as junior and senior parties. The burden is simply upon Wilson, as the junior party, to establish a prior and independent conception of the invention by a preponderance of the evidence. [773]

It is true that Wilson has established no disclosure of the invention before this conference. He offers in evidence as his Exhibit "Reproduction Sketch of Sketches of late January and early February, 1911," a reproduction from recollection of different designs of one-piece keys with portions of the underreamer cooperating therewith, which he submitted at this conference. Only one of these embodies the present invention, and the others show a logical development from the former two-piece key design. From Wilson's testimony it cannot be determined whether he claims to have made such sketches before or during the con-

ference. Wilcox testifies (Q. 87) that the first disclosure of the invention he received was by a sketch which Wilson had in his hand and was discussing at this conference. W. W. Wilson testifies (Q. 369) that the downward projections on the one-piece key on the sketch was made by Wilson during the conference. Both also testify that the only suggestion or part Bole took in the conference was a statement as to the means for removing the key.

This occurrence is testified to by W. W. Wilson as follows (Q. 344):

. . . When Mr. Wilson said he could use a key of a single piece, with a downward projection which would hold it in the bore of the underreamer body, and that he could get it into place but that he did not know exactly how to get it out, Mr. Bole said 'Pry it out.' . . . Mr. E. C. Wilson then said 'Yes, it might be pried out, but I don't think so.' Then followed a general discussion of means for prying the key out of place. Mr. E. C. Wilson said 'It will be necessary to pry one end of the key up and hold it there, and then drive it out sideways.' Mr. Bole said that he could make such a tool or that he could make a tool that would do that. . .

The contention on behalf of Bole is that this suggestion from Bole indicates such knowledge of the invention on his part as to denote prior conception of the same, and in fact negatives any independent conception of the invention by Wilson since the [774] very purpose of the one-piece key is its ready removability. It is believed, however, that this evi-

dence does not point to the conclusion urged but that at most it merely indicates that Wilson had not worked out all the details of the invention, and that Bole suggested one of the details. This does not, however, as is also urged by counsel for Bole, constitute Bole a joint inventor. The means for removing the key is not a structural element of the invention defined in the issue and while essential to the one-piece key underreamer, it is at most merely ancillary to the main invention, the sole possession of which is not to be lost by an independent suggestion of the detail (*Larkin v. Richards*, 122 O. G., 2390.)

Another circumstance which is believed to limit Bole's claim to the key removing tool rather than to the key itself, is his "Exhibit January 27, 1911 Sketch." This exhibit comprises a rectangular portion of tracing linen upon which appears an outline sketch of a portion of an underreamer with the one-piece key constituting the distinguishing feature of the present invention, one side of the key being shown elevated to removing position by a lever or key-removing tool. Also sketched in outline. Upon the face of the exhibit appear the notations, "Key remover for new reamer if adopted," "inventor—Robert E. Bole, Jan. 27th, 1911," "Witness—W. H. Fahnestock, E. F. Grigsby." Fahnestock, testifying in behalf of Wilson, and Grigsby testifying in behalf of Bole, both state that while their purported signatures on this exhibit appear to be their own, they do not recall signing the alleged document as witnesses nor do

they recall ever having before seen the same. Because of this testimony and because of certain physical features of the exhibit, considerable controversy has arisen as to its genuineness, the contention being made in behalf of Wilson that Bole is guilty of forgery in respect thereto. [775] The contention in behalf of Bole, on the other hand, is that, because of the failure of Fahnestock and Grigsby to at least deny their signatures to this alleged document, Bole is established in possession of the invention at least as early as the date, January 27, 1911, appearing thereon, which date is prior to that of the alleged conference at which Wilson disclosed the invention. All that need be said in regard to that controversy is that the sketch is not proved to have been witnessed by Fahnestock and Grigsby or disclosed to any one at the date noted thereon or at any date prior to the conference above referred to. For the present purpose, the greatest significance attaching to this exhibit is the manner in which it is introduced in evidence. The notation upon the face of this exhibit refers to Bole as the inventor, not of the one-piece key, but of the key-removing tool and Bole himself stamps the exhibit as of this character in introducing it. He testifies (Q. 84), in producing the exhibit:

“I made a tool or a sketch of such a tool, which I have at the present time.”

Various employees of the Wilson and Willard Manufacturing Company, Knapp (Qs. 35, 45, 169), Berg (Qs. 205, 206), Houriet (Rebuttal, Q. 41), and Wills (Rebuttal, Qs., 80, 81) testify that they worked

on the Wilson underreamer with the one-piece key therein embodying the invention, and all deny Bole's assertion that such device was made under his instructions or by means of a sketch with his name thereon. A motion was made at final hearing in behalf of Bole to strike out the testimony of Houriet and Wills as not proper rebuttal, but their testimony here referred to is so obviously rebuttal in character that further consideration of the motion is deemed unnecessary.

In behalf of Bole, it is pointed out as significant that while numerous shop records of the Wilson and Willard Manufacturing Company have been produced in evidence, the original order obtained [776] by Bole in September, 1908, in which he alleges to have disclosed the invention, and the key sketch which must have accompanied the shop orders for the construction of the first underreamer embodying the invention, are missing. While the absence of these documents may have some weight, it is not sufficient to discredit the positive testimony of the witnesses or to alter the conclusions arising from other circumstances of the case. Wilson, Willard, and W. W. Wilson all testify that diligent search was made for the September, 1908, order, and Wilson gave similar testimony in regard to the key sketch accompanying the shop orders for the making of the device. Moreover, as already stated, the employees who made the device all testify that it was not made by sketch or other instructions from Bole.

Moreover, of all the witnesses in behalf of Wilson, only Willard and Wilcox testify that Bole asserted

any claim to the invention prior to January, 1913, count and Bole's withdrawing his business from the the date of the controversy over the Bole pump ac-Wilson and Willard Manufacturing Company; and these witnesses testify positively that such claim by Bole was not made until sometime after the Wilson Underreamer with the invention embodied therein had been manufactured and placed on the market and its success assured. During this time, and in fact up to January, 1913, when Bole left, the new underreamer, like the former types, was manufactured upon Wilson's personal account. Bole does not testify that he protested against this state of affairs, and so far as the record shows, he did not approach Wilson, nor did he take other steps to assert his claim until the controversy of January, 1913, occurred. It is true, as counsel for Bole asserts, that Wilson himself delayed in filing his application until after his opponent's filing date, but Wilson's delay in filing, unlike Bole's, was during an active [777] assertion of the invention as his own.

When all the circumstances of the case are considered, it is believed that the evidence clearly establishes Wilson and not Bole as the original inventor.

Priority of invention of the subject-matter of this interference is awarded to Elihu C. Wilson, the junior party.

Limit of appeal: April 20, 1915.

H. E. STAUFFER,

Examiner of Interferences.

March 20, 1915. [778]

[**Stipulation and Order of April 23, 1915, in re
Withdrawal of Exhibits and Transmission to
U. S. Patent Office.**]

*In the United States District Court, Southern Dis-
trict of California, Southern Division.*

No. B-19—IN EQUITY.

ROBERT E. BOLE, and EDWARD DOUBLE,
Complainants,
vs.

WILSON AND WILLARD MANUFACTURING
COMPANY, and ELIHU C. WILSON,
Defendants.

And now, to wit, April 22d, 1915, it is hereby stipulated and agreed by and between the parties hereto:

I. That the clerk of the court shall forthwith make certified copies of all such exhibits, introduced in evidence on the trial of this cause, as were received by said clerk from the Commissioner of Patents and identified as exhibits in Interference 37,126 Wilson vs. Bole, pending in the United States Patent Office, and shall forthwith return to the Commissioner of Patents, at Washington, D. C., by registered mail, all exhibits transmitted to him by said Commissioner of Patents and relating to the said interference.

II. That the cost of making such certified copies shall be paid by the party introducing the respective exhibits in evidence.

III. That duplicates of such certified copies of exhibits may be transmitted to the United States

Circuit Court of Appeals for the Ninth Circuit upon the Appeal herein taken by defendants, as a part of the Transcript of Record therein to be certified up by the clerk of this court. [779]

IV. The parties hereto stipulate and agree that the Commissioner of Patents upon a request from the clerk of the said United States Circuit Court of Appeals shall immediately transmit said original exhibits so copied to said clerk for use of said court upon said appeal, to be returned to the Commissioner of Patents upon the determination of said appeal by said court.

FREDERICK S. LYON,

Solicitor for Compalinants.

RAYMOND IVES BLAKESLEE,

Solicitor for Defendants.

The foregoing stipulation is hereby approved and it is ordered accordingly.

Dated April 23, 1915.

OSCAR A. TRIPPET,

District Judge.

[Endorsed]: In Equity. No. B-19. United States States District Court, Southern District of California, Southern Division. Robert E. Bole and Edward Double, Complainants, vs. Wilson and Willard Manufacturing Comapny, and Elihu C. Wilson, Defendants. Stipulation & Order in Regard to Exhibits. Filed Apr. 23, 1915. Wm. M. Van Dyke, Clerk. By Chas. N. Williams, Deputy Clerk. Raymond Ives Blakeslee, 728-30 California Building, Los Angeles, Cal., Solicitor for Defendants. [780]

[**Stipulation and Order of April 26, 1915, in re Transcript of Testimony and Portions to be Stricken, in Preparation of Transcript of Record on Appeal.**]

In the United States District Court, Southern District of California, Southern Division.

No. B-19—IN EQUITY.

ROBERT E. BOLE and EDWARD DOUBLE,
Complainants,

vs.

WILSON AND WILLARD MANUFACTURING
COMPANY and ELIHU C. WILSON.
Defendants.

It is hereby stipulated and agreed by and between the respective parties hereto by their solicitors, and subject to the approval of the Court, that the Clerk in preparing the transcript on appeal herein shall include in such transcript, under the Praeceptum filed herein, the complete record of the testimony and proceedings had in connection therewith on the trial of this case, subject to the following eliminations by cancellation, to wit, strike out the matter from line 20, page 1, to the beginning of the sentence in line 28, page 8, with the exception of the words "Mr. Lyon," line 27, inclusive; strike out pages 9 to 18, inclusive; strike out lines 6 to 18, page 19, inclusive.

FREDERICK S. LYON,

Solicitor for Complainants.

RAYMOND IVES BLAKESLEE,

Solicitor for Defendants.

Dated April 26th, 1915. [781]

The foregoing Stipulation is hereby approved and it is ordered accordingly.

Dated April 26, 1915.

OSCAR A. TRIPPET,
District Judge.

[Endorsed]: In Equity. No. B-19. United States District Court, Southern District of California, Southern Division. Robert E. Bole, and Edward Double, Complainants, vs. Wilson and Willard Manufacturing Company, and Elihu C. Wilson, Defendants. Stipulation & Order. Filed Apr. 26, 1915. Wm. M. Van Dyke, Clerk. By R. S. Zimmerman, Deputy Clerk. Raymond Ives Blakeslee, 728-30 California Building, Los Angeles, Cal., Solicitor for Defendants. [782]

In the United States District Court, Southern District of California, Southern Division.

No. B-19—IN EQUITY.

ROBERT E. BOLE, and EDWARD DOUBLE,
Complainants,

vs.

WILSON AND WILLARD MANUFACTURING
COMPANY and ELIHU C. WILSON,
Defendants.

Assignments of Error.

Come now the defendants above named and specify and assign the following as the errors upon which they will rely upon their appeal to United States Circuit Court of Appeals for the Ninth Circuit, from the decree or order of this Court of April 16th, 1915:

I.

That the District Court of the United States for the Ninth Circuit, Southern District of California, Southern Division, erred in entering any decree in favor of complainants;

II.

That said Court erred in finding and decreeing that the letters patent sued on are good and valid in law;

III.

That said Court erred in finding and decreeing that the letters patent sued on, because good and valid in law, are infringed; [783]

IV.

That said Court erred in finding and decreeing that Robert E. Bole was the original, first, true and sole inventor of the invention disclosed and claimed in and by the letters patent sued on;

V.

That said Court erred in not finding and decreeing that Elihu C. Wilson of the defendants was the original, first, true and sole inventor of the invention of the letters patent sued on;

VI.

That said Court erred in finding and decreeing that the letters patent sued on are not anticipated by the manufacture, sale and use of under-reamers manufactured and sold to others to be used by the defendants prior to the date of application of the letters patent sued on;

VII.

That said Court erred in finding and decreeing

that the complainant, Robert E. Bole, did not surreptitiously or unjustly obtain the letters patent sued on for that which was in fact invented by another, viz: Elihu C. Wilson of the defendants, who was using reasonable diligence in adapting and perfecting the same;

VIII.

That said Court erred in not holding and finding that the complainant, Robert E. Bole, was estopped from asserting any right in and about the invention of the patent sued on and from prosecuting any claim of infringement of said letters patent as against the defendants;

IX.

That said Court erred in finding that the defendant, [784] Elihu C. Wilson, obtained the invention of the patent sued on from the complainant, Robert E. Bole;

X.

That said Court erred in receiving in evidence the deposition of Roy L. Heber as a witness on behalf of complainants;

XI.

That said Court erred in not following and adopting the decision of the United States Patent Office that the defendant, Elihu C. Wilson, and not the complainant, Robert E. Bole, is the original, true, first and sole inventor of the invention of the letters patent sued on;

XII.

That said Court erred in not admitting certain testimony offered or attempted to be taken on behalf of defendants tending to further establish the de-

fendant, Elihu C. Wilson, and not the complainant, Robert E. Bole, as the original, true, first and sole inventor of the invention of the letters patent sued on;

XIII.

That said Court erred in refusing to admit certain evidence offered by defendants to further prove that the defendant, Elihu C. Wilson, and not the complainant, Robert E. Bole, was the original, true, first and sole inventor of the invention of the patent sued on;

XIV.

That said Court erred in holding that the complainant, Robert E. Bole, was in any manner diligent in and about the invention of said letters patent sued on, if in fact in any manner possessed of the same prior to disclosure of the same to him by the defendant, Elihu C. Wilson;

XV.

That said Court erred in holding that the defendant, Elihu [785] C. Wilson, was lacking in diligence or negligent as to reducing the invention to practice or applying for patent for same;

XVI.

That said Court erred in not holding and finding that the complainant, Robert E. Bole, obtained the invention of the patent sued on from the defendant, Elihu C. Wilson.

In order that the foregoing Assignments of Error may be made of record, the defendants present the same to the Court and petition that disposition may be made thereof in accordance with the laws of the

United States thereunto provided.

WHEREFORE, the said defendants pray that the said decree and order of this Court made and entered on April 16th, 1915, enjoining and restraining defendants, be reversed, in part and in whole, and that the United States District Court for the Southern District of California, Southern Division, be directed to enter an order setting aside in entirety the order and decree of April 16th, 1915.

Respectfully submitted,

RAYMOND IVES BLAKESLEE,
Solicitor and of Counsel for Defendants.

[Endorsed]: No. B-19. United States District Court, Southern District of California, Southern Division. Robert E. Bole and Edward Double, Complainants, vs. Wilson and Willard Manufacturing Company and Elihu C. Wilson, Defendants. In Equity. Assignments of Error on Appeal. Filed Apr. 21, 1915. Wm. M. Van Dyke, Clerk. By Leslie S. Colyer, Deputy. Received a copy of the within Assignment of Error on Appeal, this 20th day of April, 1915. Frederick S. Lyon, Solicitor for Complainant. Raymond Ives Blakeslee, 728-30 California Building, Los Angeles, Cal. Solicitor for Defendants. [786]

In the United States District Court, Southern District of California, Southern Division.

No. B-19—IN EQUITY.

ROBERT E. BOLE and EDWARD DOUBLE,
Complainants,

vs.

WILSON AND WILLARD MANUFACTURING
COMPANY and ELIHU C. WILSON,
Defendants.

Petition for Order Allowing Appeal.

Wilson and Willard Manufacturing Company and Elihu C. Wilson, defendants in the above-entitled cause, conceiving themselves aggrieved by the Interlocutory Order and Decree filed and entered on the 16th day of April, 1915, in pursuance of the decretal order of April 13th, 1915, in the above-entitled cause, whereby it was ordered, adjudged and decreed that the complainants' letters patent are good and valid in law; tht defendants have infringed same; and that a perpetual injunction issue directed to the said defendants, its and his officers, attorneys, agents, servants, workmen, clerks and associates, enjoining and restraining them, and each of them, from directly or indirectly making or causing to be made, using or causing to be used, selling or causing to be sold, or otherwise disposing of in any manner any underreamer or device containing or embodying or employing the invention granted and patented in and by said letters patent of complainants, No. 1,080,135, or any device [787] or machine capable

of being combined or adapted to be used in infringement of said letters patent or of the claims thereof in any manner whatsoever, and from making or causing to be made, using or causing to be used, selling, or causing to be sold, or otherwise disposed of in any manner any machine like the so-called Wilson Improved Underreamer in evidence in this cause, together with costs and disbursements of this suit to the complainants, and awarding other relief,—now comes Raymond Ives Blakeslee, Esq., solicitor for defendants, and petitions said Court for an order allowing defendants, Wilson and Willard Manufacturing Company and Elihu C. Wilson, to prosecute an appeal from said Interlocutory Order and Decree and the decision of the Court thereupon, and from the whole thereof, to the Honorable, the United States Circuit Court of Appeals for the Ninth Circuit, for the reasons specified in the Assignment of Errors which is filed herewith, under and according to the laws of the United States in that behalf made and provided; and also that an order be made fixing the amount of security which defendants shall give and furnish upon such appeal; and that a citation issue as provided by law, and that a certified transcript of the records, proceedings and papers upon which said Decree was based be forthwith transmitted to the United States Circuit Court of Appeals for the Ninth Circuit, in accordance with the rules in equity promulgated by the Supreme Court of the United States and the statutes made and provided.

And your petitioners further pray that an order

be made fixing the sum of security which defendants shall give and [788] furnish upon such appeal.

And you petitioners will ever pray.

RAYMOND IVES BLAKESLEE,
Solicitor for Defendants.

[Endorsed]: No. B-19. United States District Court, Southern District of California, Southern Division. Robert E. Bole and Edward Double, Complainants, vs. Wilson and Willard Manufacturing Company and Elihu C. Wilson, Defendants. In Equity. Petition for Order Allowing Appeal. Filed Apr. 21, 1915. Wm. M. Van Dyke, Clerk. By Leslie S. Colyer, Deputy. Raymond Ives Blakesslee, 728-30 California Building, Los Angeles, Cal., Solicitor for Defendants. [789]

In the United States District Court, Southern District of California, Southern Division.

At a stated term to wit, the January term, A. D. 1915, of the District Court of the United States of America, of the Ninth Judicial Circuit, in and for the Southern District of California, Southern Division, held at the courtroom in the City of Los Angeles, on the 21st day of April, in the year of our Lord one thousand nine hundred fifteen. Present: The Hon. OSCAR A. TRIPPET, United States District Judge.

No. B-19—IN EQUITY.

ROBERT E. BOLE and EDWARD DOUBLE,
Complainants,

vs.

WILSON AND WILLARD MANUFACTURING
COMPANY and ELIHU C. WILSON,
Defendants.**Order Allowing Appeal.**

In the above-entitled cause the defendants having filed their petition for an order allowing an appeal from the order of this Court made and entered April 16, 1915, together with Assignments of Error:

Now upon motion of Raymond Ives Blakeslee, Esq., solicitor for defendants, it is ordered that said appeal be, and hereby is allowed to defendants, to the United States Circuit Court of Appeals for the Ninth Circuit, from the said order or decree made and entered by this Court in this cause, on April 16th, 1915, that defendants and each of them be enjoined and restrained from infringements of those certain letters patent No. 1,080,135, [790] of complainants specified in said order, and further awarding costs and other relief to complainants, and that the amount of defendants' bond on said appeal be, and the same is hereby, fixed at the sum of Two Hundred Fifty Dollars (\$250.00).

IT IS FURTHER ORDERED, that upon the filing of such security a certified transcript of the records and proceedings herein be forthwith transmitted to said United States Circuit Court of Appeals for the Ninth Circuit, in accordance with the

rules in equity by the Supreme Court of the United States promulgated, and in accordance with the statutes made and provided, together with the exhibits on file in this case or duly certified copies thereof.

Dated April 21st, 1915.

OSCAR A. TRIPPETT,
Judge.

[Endorsed]: No. B-19. United States District Court, Southern District of California, Southern Division. Robert E. Bole and Edward Double, Complainants, vs. Wilson and Willard Manufacturing Company, and Elihu C. Wilson, Defendants. In Equity. Order Allowing Appeal. Filed Apr. 21, 1915. Wm. M. Van Dyke, Clerk. By Leslie S. Colyer, Deputy. Raymond Ives Blakeslee, 728-30 California Building, Los Angeles, Cal., Solicitor for Defendants. [791]

In the United States District Court, Southern District of California, Southern Division.

No. B-19—IN EQUITY.

ROBERT E. BOLE and EDWARD DOUBLE,
Complainants,

vs.

WILSON AND WILLARD MANUFACTURING
COMPANY and ELIHU C. WILSON,
Defendants.

Bond on Appeal.

KNOW ALL MEN BY THESE PRESENTS:
That Maryland Casualty Company, a corporation

organized and existing under the laws of the State of Maryland, and duly licensed to transact business in the State of California, is held and firmly bound unto Edward Double and Robert E. Bole, complainants in the above-entitled suit, in the penal sum of Two Hundred Fifty Dollars (\$250.00), to be paid to the said Edward Double and Robert E. Bole, their heirs and assigns, which payment well and truly to be made the Maryland Casualty Company binds itself, its successors and assigns, firmly by these presents.

Sealed with the corporate seal and dated this 21st day of April, 1915.

The condition of the above obligation is such that whereas the said defendants, Wilson and Willard Manufacturing Company, and Elihu C. Wilson, of the above-entitled suit, are about to take an appeal to the United States Circuit Court of Appeals for the Ninth Circuit, to reverse an order or decree made, [792] rendered and entered on the 16th day of April, 1915, by the District Court of the United States, for the Southern District of California, Southern Division, in the above-entitled cause by which the said defendants, Wilson and Willard Manufacturing Company, and Elihu C. Wilson, were enjoined and restrained from infringement of United States Letters Patent, No. 1,080,135, and were awarded other relief, with costs to said complainants:

NOW, THEREFORE, the condition of the above obligation is such that if said Wilson and Willard Manufacturing Company, and Elihu C. Wilson, shall

prosecute their said appeal to effect and answer all damages and costs, if they shall fail to make good their appeal, then this obligation shall be void; otherwise to remain in full force and effect.

IN WITNESS WHEREOF, the seal and signature of said principal is hereunto affixed and the corporate name of said surety is hereto affixed and attested by its duly authorized attorneys in fact at Los Angeles, California, this 21st day of April, 1915.

ELIHU C. WILSON. (Seal)

THE MARYLAND CASUALTY COMPANY,

By JAMES L. VAN NORMAN,

Attorney-in-Fact.

WILSON & WILLARD MFG. CO.

[Seal]

Per E. C. WILSON,

Pres.

VIVIAN J. NORTH. (Seal.)

Attorney-in-Fact.

State of California,

County of Los Angeles,—ss.

On this 21 day of April, 1915, before me, L. B. Belcher, a Notary Public in and for the said County of Los Angeles, State of California, residing therein, duly commissioned and sworn, personally appeared James L. Van Norman known to me to be the attorney in fact, and Vivian J. North, known to me to be the [793] attorney in fact of the Maryland Casualty Company, the corporation that executed the within instrument, and acknowledged to me that said corporation executed the same; and that the signatures to said instrument of said attorney in fact, are the genuine signatures, respectively, of said

James L. Van Norman, its attorney in fact, and said Vivian J. North, its attorney in fact.

[Seal]

L. B. BELCHER,

Notary Public in and for the County of Los Angeles,
State of California.

[Endorsed]: No. B-19. United States District Court, Southern District of California, Southern Division. Robert E. Bole and Edward Double, Complainants, vs. Wilson and Willard Manufacturing Company, and Elihu C. Wilson, Defendants. In Equity Bond on Appeal. Approved hereby this 22d day of April, 1915. Oscar A. Trippet, District Judge. Raymond Ives Blakeslee, 728-30 California Building, Los Angeles, Cal., Solicitor for Defendants. Filed Apr. 22, 1915. Wm. M. Van Dyke, Clerk. By Leslie S. Colyer, Deputy Clerk. [794]

[Order for Transmission of Certain Original Physical Exhibits to United States Circuit Court of Appeals for the Ninth Circuit.]

In the District Court of the United States, in and for the Southern District of California, Southern Division.

No. B-19—EQ.

ROBERT E. BOLE et al.,

Complainants,

vs.

WILSON & WILLARD MANUFACTURING
COMPANY et al.,

Defendants.

It appearing that the respective parties to this cause have requested such action, and good cause appearing therefor, it is ordered that the following original exhibits, to wit: Defendants' Exhibit 1, Wilson single-piece key reamer; Defendants' Exhibit 9, Wilson Reamer Block Elevating Lever; Defendants' Exhibit 11, Key inserted by Bole in Defendants' Exhibit 1; and Defendants' Exhibit 12, Lever used by witness Bole in demonstration,—forming part of the evidence in this cause, being necessary to inspection by the United States Circuit Court of Appeals for the Ninth Circuit, and by the Supreme Court of the United States, if said cause is appealed thereto, may be sent up as original exhibits instead of making copies or duplicates thereof, in addition to the transcript of the record, in accordance with Subdivision 4 of Rule 14 of the Rules of the United States Circuit Court of Appeals for the Ninth Circuit, and Subdivision 4 of Rule 8 of the Rules of the Supreme Court of the United States; the said original exhibits to be delivered to the Clerk of the United States Circuit Court of Appeals for the Ninth Circuit, to be returned to the files of the cause in this court, upon the final determination of the appeal herein by the United States Circuit Court of Appeals for the Ninth Circuit or by the Supreme Court of the United States, if appealed thereto.

OSCAR A. TRIPPET,

Judge.

Los Angeles, Cal., August 5, 1915. [796]

[Endorsed]: No. B-19—Eq. United States District Court, Southern District of California. Southern Division. Robert E. Bole et al., vs. Wilson & Willard Manufacturing Company et al. Order for Transmission of Original Exhibits. Filed Aug. 5, 1915. Wm. M. Van Dyke, Clerk. By Leslie S. Colyer, Deputy Clerk. [796]

[Praeipe for Transcript on Appeal.]

In the United States District Court, Southern District of California, Southern Division.

No. B-19—IN EQUITY.

ROBERT E. BOLE and EDWARD DOUBLE,
Complainants,

vs.

WILSON & WILLARD MANUFACTURING
COMPANY and ELIHU C. WILSON,
Defendants.

PRAECIPE UNDER EQUITY RULE 75.

To the Clerk of the Court:

You will please incorporate into the Transcript on Appeal from this Court to the Circuit Court of Appeals an order allowing appeal on behalf of defendants, made and entered this 21st day of April, 1915, the following portions of the record in this cause in equity, to wit:

The certified copy of the trial record of the testimony and proceedings taken and had in this case as duly filed;

The Bill of Complaint herein;

The Amended Answer and Amendments to the Amended Answer of the defendants herein;

The Reply of Complainants;

The Assignments of Error filed herein;

The Names and Addresses of the Solicitors and Counsel for the parties herein;

The Citation on Appeal herein;

The Petition for Order Allowing Appeal herein;

The Order Allowing Appeal herein;

All of the original Exhibits herein or duly certified copies thereof; [797]

The Opinion of the District Judge on file herein;

The stipulation of April 22d, 1915, and Court Order of April 23d, 1915, as to withdrawal of exhibits.

The Interlocutory Decree herein.

Very respectfully,

RAYMOND IVES BLAKESLEE,

Solicitor for Defendants-Appellants.

[Endorsed]: In Equity No. B-19. United States District Court, Southern District of California, Southern Division. Robert E. Bole, and Edward Double, Complainants, vs. Wilson and Willard Manufacturing Company and Elihu C. Wilson, Defendants. Filed Apr. 26, 1915. Wm. M. Van Dyke, Clerk. By Chas. N. Williams, Deputy Clerk. Praecept Under Equity Rule 75. Received a copy of the within Praecept this 23d day of April, 1915. Frederick S. Lyon, Solicitor for Complainants-Appellees. Raymond Ives Blakeslee, 728-30 California Building, Los Angeles, Cal., Solicitor for Defendants. [798]

[Certificate to Transcript on Appeal.]

*In the District Court of the United States, in and for
the Southern District of California, Southern
Division.*

No. B-19—EQ.

ROBERT E. BOLE and EDWARD DOUBLE,
Complainants,

vs.

WILSON & WILLARD MANUFACTURING
COMPANY and ELIHU C. WILSON,
Defendants.

I, Wm. M. Van Dyke, Clerk of the District Court of the United States of America, in and for the Southern District of California, do hereby certify the foregoing eight hundred (800) typewritten pages, numbered from 1 to 798 inclusive, and including numbers 93A and 681A, and comprised in two (2) volumes, to be a full, true and correct copy of the Bill of Complaint, Subpoena ad respondendum, Amended and Substituted Answer, Motion to Strike Alleged Counterclaim, Order Granting Motion to Strike Alleged Counterclaim, Motion for Leave to Amend, and Amendment to Amended and Substituted Answer, Order Granting Motion to Amend, etc., Reply, Interlocutory Decree, Opinion, Certified Transcript of Testimony, all Exhibits except those authorized by Order of August 5, 1915, to be transmitted to the United States Circuit Court of Appeals for the Ninth Circuit, Stipulation and Order of April 23, 1915, in re withdrawal of exhibits and trans-

mission to U. S. Patent Office, Stipulation and Order of April 26, 1915, in re transcript of testimony and portions to be stricken in preparation of transcript of record on appeal, Assignments of Error, Petition for Order Allowing Appeal, Order Allowing Appeal, Bond on Appeal, Order for Transmission of certain original exhibits, [799] (viz.: Defendant's Exhibit 1, Wilson Single-piece key reamer; Defendants' Exhibit 9, Wilson Reamer Block Elevating Lever; Defendants' Exhibit 11, Key inserted by Bole in Defendants' Exhibit 1; and Defendants' Exhibit 12, Lever used by Bole in demonstration), to the United States Circuit Court of Appeals, under and pursuant to subdivision 4 of Rule 14 of the Rules of the United States Circuit Court of Appeals for the Ninth Circuit, and Praecipe for Transcript on Appeal, and that the same together constitute the record in said cause as specified in the said Praecipe for Transcript on Appeal, filed in my office on behalf of the appellants by their solicitor of record;

I do further certify that the cost of the foregoing record is \$471.40, the amount whereof has been paid me by the Wilson & Willard Manufacturing Company and Elihu C. Wilson, the appellants in said cause.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seal of the District Court of the United States of America, in and for the Southern District of California, Southern Division, this 17th day of August, in the year of our Lord, one thousand nine hundred and fifteen, and of our Inde-

pendence, the one hundred and fortieth.

[Seal]

WM. M. VAN DYKE,

Clerk of the District Court of the United States, in
and for the Southern District of California.

By Chas. N. Williams,

Deputy Clerk. [800]

[Endorsed]: No. 2641. United States Circuit Court of Appeals for the Ninth Circuit. Wilson and Willard Manufacturing Company and Elihu C. Wilson, Appellants, vs. Robert E. Bole and Edward Double, Appellees. Transcript of Record. Upon Appeal from the United States District Court for the Southern District of California, Southern Division.

Filed August 24, 1915.

F. D. MONCKTON,

Clerk of the United States Circuit Court of Appeals
for the Ninth Circuit.

By Meredith Sawyer,

Deputy Clerk.

**[Order Extending Time to August 1, 1915, to File
Record.]**

*In the United States Circuit Court of Appeals,
Ninth Judicial Circuit.*

WILSON & WILLARD MANUFACTURING
COMPANY and ELIHU C. WILSON,
Appellants,

vs.

ROBERT E. BOLE and EDWARD DOUBLE,
Appellees.

Good cause appearing therefor, it is hereby ordered, that the time heretofore allowed said appellants to docket said cause and file the record thereof, with the Clerk of the United States Circuit Court of Appeals for the Ninth Circuit, be and the same is hereby enlarged and extended to and including the 1st day of August, 1915.

Dated at Los Angeles, May 12, 1915.

OSCAR A. TRIPPET,
U. S. District Judge, Southern District of California.

[Endorsed]: No. 2641. United States Circuit Court of Appeals for the Ninth Circuit. Wilson & Willard Manufacturing Company et al., vs. Robert E. Bole et al. Order Extending Time to File Record. Filed Sep. 7, 1915. F. D. Monekton, Clerk.

**[Order Extending Time to September 1, 1915, to File
Record.]**

*In the United States Circuit Court of Appeals,
Ninth Judicial Circuit.*

WILSON & WILLARD MANUFACTURING
COMPANY and ELIHU C. WILSON,
Appellants,

vs.

ROBERT E. BOLE and EDWARD DOUBLE,
Appellees.

Good cause appearing therefor, it is hereby ordered, that the time heretofore allowed said appellants to docket said cause and file the record thereof, with the Clerk of the United States Circuit Court of appeals for the Ninth Circuit, be and the same is hereby enlarged and extended to and including the 1st day of September, 1915.

Los Angeles, California, July 30th, 1915.

OSCAR A. TRIPPET,

United States District Judge, Southern District of
California.

[Endorsed]: No. 2641. United States Circuit Court of Appeals for the Ninth Circuit. Wilson & Willard Manufacturing Company et al. vs. Robert E. Bole et al. Order Extending Time to File Record. Filed Sep. 7, 1915. F. D. Monckton, Clerk.

